

Department of Environmental Conservation

Division of Environmental Remediation

Site Name: South Hill Dump

Site Number: 712009

Contract Number: D007992

Location: Town of Cortlandville

Cortland County, New York

Contract Documents

MACTEC Engineering and Consulting, P.C.



March 2011

New York State Department of Environmental Conservation ANDREW M. CUOMO, *Governor* JOE MARTENS, *Commissioner*

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CONTRACT DRAWINGS BOUND SEPARATELY

SECTION I

Advertisement and Notice to Bidders

New York State Department of Environmental Conservation

Project Name: South Hill Dump Site, NYS Site Number: 712009

Sealed bids for the <u>South Hill Dump Site</u> ("project"), will be received by the New York State Department of Environmental Conservation, Division of Management and Budget Services, 10th Floor, 625 Broadway, Albany, New York, 12233-5027, Attn: Bureau of Expenditures until the time of <u>1:00 P.M. EST</u> and on the date of <u>Tuesday, April 19, 2011</u>. The bids will be publicly opened and read aloud at the above time and date. Telegraphic or other electronically transferred bids are not acceptable.

The project involves the implementation of remedial activities at the South Hill Dump Site located off of South Hill Road in the Town of Cortlandville, Cortland County. These include, but are not necessarily limited to, the onsite relocation of wastes followed by the construction of a clean soil cover over all fill areas. The estimated range for this work is: \$3,000,000 to \$5,000,000.

Contract Documents are only available in electronic format at no charge. Access to electronic copies of biddable Contract Document drawings, specifications, proposal forms, addenda, and a separate Limited Site Data Document may be downloaded from the Department web site link http://www.dec.ny.gov/chemical/59233.html. Hard copies of the Contract Documents are available upon request from the Division of Environmental Remediation, 12th Floor, 625 Broadway, Albany, New York, 12233-7012, Attn: Bureau of Program Management - Contracts and Payments Section at (518) 402-9711.

Proposals will be accepted only from bidders who attend the Pre-Bid Conference. All proposals must be made on the official proposal form and enclosed in the envelope which will be provided at the Pre-Bid Conference. Each proposal must be accompanied by a deposit or a bid bond in the amount of 5% of bid amount. All Bidders must attend a Pre-Bid Conference to discuss special requirements for the contract, to be held on <a href="https://doi.org/10.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jhig.1001/jh

Minority and Women owned businesses are encouraged to submit bids in response to this solicitation. The New York State Department of Environmental Conservation is an Equal Opportunity/Affirmative Action Employer.

The Contractor shall adhere to the New York State Department of Environmental Conservation Guidelines Regarding Permissible Contacts During a Procurement and the Prohibition of Inappropriate Lobbying Influence. For the purpose of this Notice to Bidders, the Director of the Division of Environmental Remediation, 12th Floor, 625 Broadway, Albany, New York, 12233-7011, shall be the Department's designated Representative. Any questions, however, shall be directed to David J. Chiusano, the Department's Project Manager and Designated Contact, at (518)402-9814.

Bidders may receive announcements of future procurement opportunities by signing up for the NYSDEC -DER's electronic mailing list ("listserv") at http://lists.dec.state.ny.us/mailman/listinfo/dercontract/procurement

Joe Martens Commissioner

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SECTION II

Terms and Definitions

Wherever used in the Contract Documents the following terms (or pronouns in place of terms) have the meanings indicated which are applicable to both the singular and plural thereof:

Addenda - Written or graphic instruments issued prior to the date for opening of Bids which interpret or modify the Contract Documents by way of changes, clarifications, or corrections.

Administrative Agreement - A written explanation of the Contract Documents, signed by Department, Engineer and Contractor on or after the Effective Date of the Agreement and dealing with procedural or administrative aspects of the Contract Documents which do not change the contract price.

Agreement - The written agreement between Department and Contractor covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

Application for Payment – Billing invoice in the form required by Department on which Contractor must request progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

Bid - The written offer or proposal of the Bidder, submitted pursuant to Article 5 of Section III of the Bidding Documents on the form provided.

Bidder - The person, partnership, corporation, joint venture or other combination thereof, who has submitted a Rid

Bid Security - The security designated in the Bidding Documents to be furnished by the Bidder as guarantee that he/she will enter into a Contract with Department for the performance of the Work, if the Work involved in the Bid is awarded to that Bidder.

Bidding Documents - The Advertisement and Notice to Bidders, Bidding Information and Requirements, the Bid Forms and Attachments, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

Bonds - Instruments of security furnished by Contractor and its surety in accordance with the Contract Documents. This refers to the labor and material payment Bond, performance Bond and those other instruments of security required by the Contract Documents.

Change Order - A document prepared and recommended by Engineer, which is reviewed by Department and has been signed by Contractor and Department and approved by Comptroller. It authorizes an addition, deletion or revision in the Work, or an adjustment in Contract Price or Contract Time, or any combination thereof, issued on or after the Effective Date of the Agreement.

Claim - Contractor's demand or assertion seeking as a matter of right, adjustment, interpretation, additional money, extension of time or other relief with respect to terms of the Contract.

Commissioner - Commissioner of the New York State Department of Environmental Conservation.

Comptroller - The Comptroller of the New York State Office of the State Comptroller.

Contract Documents - The Agreement, Addenda (which pertain to the Contract Documents), Contractor's Bid including documentation accompanying the Bid and any post-Bid documentation submitted prior to the Notice of Award, all bid forms and attachments required by Section V, the General Conditions, the Supplementary Conditions, the Standard Specifications, the Supplementary Specifications, Appendix A, Appendix B, Measurement for Payment, Advertisement, Terms and Definitions, Bidding Information and Requirements, Supplementary Bid Information and Requirements, and the Drawings, together with all amendments, modifications and supplements issued pursuant to paragraphs 2.4 and 2.5 of Article 2 of the General Conditions on or after the Effective Date of the Agreement.

Contract Price - The money payable by Department to Contractor under the Contract Documents.

Contract Time - The number of days permitted by the Agreement for completion of Work. This number may be stated or implied by a requirement that all work be completed by a certain date.

Contractor - The person, partnership, corporation, joint venture, or other combination thereof, who has entered into the Contract with Department for the Work. The term "Contractor" means Contractor or its authorized representative.

Correction Period - The period of time within which Contractor shall promptly, without cost to Department and in accordance with Department's written instructions, either correct Defective Work or if it has been rejected by Department, remove it from the site and replace it with nondefective Work, pursuant to paragraph 12.12 of the General Conditions.

Cost and Pricing Data - Refers to all data available to and relied upon by Contractor in negotiating, pricing or performing Work covered by a Change Order or a Proposed Change Order, or involved in a claim. Sample Cost and Pricing Data include data and supporting documents pertaining to labor wages and material rates, crew mixes, labor productivity, payroll costs, price catalogs, quotations from and payments to Subcontractors, Suppliers or others, equipment production rates, equipment costs, sales and use taxes, cost of premiums for Bonds and Insurances, costs related to the determination of general and administrative overhead, site office overhead, profit, estimates and estimating guides, Contractor's computations and projections, and all of the relevant assumptions made by Contractor in pricing or figuring increases or decreases in Contract Price or Contract Time.

Cost of the Work Involved - The sum of all costs necessarily incurred and paid by Contractor in the proper performance of the Work involved.

Day - A calendar day of 24 hours lasting from midnight one day to midnight the next day.

Defective Work - Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Department at Substantial Completion in accordance with paragraphs 13.8 or 13.10).

Delivery - Shall be effected on the date of receipt by the addressee.\

Department - New York State Department of Environmental Conservation.

Dispute - A Claim that is not resolved pursuant to Section VIII, Article 10 of the General Conditions becomes a Dispute to be resolved under Appendix B Article IX of the Agreement.

Department Representative(s) - Employee(s) of Department engaged in Department activities relating to the work but who is not responsible for day to day administration of the Project.

Design Engineer - The individual, partnership, corporation, joint venture, or any combination thereof, who prepared and sealed the Contract Documents that were bid by Department.

Designated Contact(s) - Individuals to whom all contacts can properly be made during the Restricted Period in relation to the Permissible Contacts during a Procurement and Prohibition of Inappropriate Lobbying Influence clause of the Contract Documents. The Project Manager shall serve as the **Department's** Designated Contact for the Contract.

Designated Representative to Resolve Disputes- Department employee responsible for resolving all disputes between Contractor and Project Manager, as identified in the Supplementary Bidding Information and Requirements.

Drawings, Plans - The Drawings, Plans or reproductions thereof, which show location, character, dimensions, and details of the Work to be performed and which are referred to in the Contract Documents.

Effective Date of the Agreement - The date on which the Agreement is approved and filed by Comptroller.

Employee - Any person working on the project mentioned in the Contract of which these specifications are a part, and who is under the direction or control, or receives compensation from Contractor or Subcontractor.

Engineer - The individual, partnership, corporation, joint venture, or any combination thereof, any entity named as Engineer in the Agreement who will have the rights and authority assigned to Engineer in the Contract Documents. The term "Engineer" means the Engineer or its authorized representative.

Equipment - All machinery and equipment, together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction and acceptable completion of the Work.

Field Order - A written order issued by Engineer to Contractor which orders minor changes in the Work in accordance with paragraph 9.2 of the General Conditions not involving an adjustment in the Contract Price or the Contract Time.

Law(*s*) - Applicable laws, rules, regulations, ordinances, codes or orders of a Federal or New York State court.

Material - Any approved material acceptable to Department and conforming to the requirements of the specifications.

Notice of Award - Department's written notice of Agreement approval and filing by the New York State Office of the State Comptroller and stating pertinent information with which Contractor must comply.

Notice of Intent to Award - The written notice by Department to a Bidder stating that upon compliance by that Bidder with the conditions precedent enumerated therein, within the time specified, Department intends to process contract through the appropriate New York State contract reviews.

Notice to Proceed - The written notice issued by Department to Contractor establishing the Date for Commencement of the Contract Time and, where applicable, authorizing Contractor to proceed with the Work at the site.

Overhead - General and administrative costs (whether at the site or in Contractor's principal or branch offices) and all other miscellaneous costs not assigned to a specific payment item as identified in Articles 9, 10 and 11 of the General Conditions.

Partial Utilization - Placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work.

Physical Completion - The Work and all parts thereof have been completed to the satisfaction of Department.

Progress Schedule - Drawings, data computer reports, and narratives disclosing Contractor's approach to the Work; the associated Early Schedule, Late Schedule and Float times, as supported by the Critical Path Method (CPM) or Bar Chart Diagram; the Schedule of Values; and the Schedule of Shop Drawing submissions.

Project - The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

Project Field Representative - Department employee assigned responsibility for the day to day administration of the Project.

Progress Payment - Payment made to the Contractor as the result of a Application for Payment which accurately reflects the Contract work completed to date.

Project Manager - Department employee identified in the Supplementary Bidding Information and Requirements, responsible for administration of work required by Contract Documents and supervision of the Project Field Representative(s).

Proposed Change Order - A document prepared on a form furnished by Department which is to be used:

1) by Department when requiring that Contractor figure the potential effect on Contract Price or Contract

Time of a proposed change, (the proposed change is ordered upon signing by Department), or 2) by

Contractor to notify Department that in the opinion of Contractor a change is required to respond to differing
or unforeseen physical conditions under which the Work is to be performed as provided in paragraph 3.11 or
3.12 of Article III of the General Conditions or to emergencies under paragraph 5.22 of Article V of the
General Conditions, or has been ordered in a Field Order, or in Engineer's approval of a Shop Drawing or
sample, or in Engineer's written interpretation or clarification of the requirements of the Contract Documents.

When signed by Department, a Proposed Change Order may or may not fully adjust Contract Price or
Contract Time, but is evidence that the change directed or documented by the Proposed Change Order will be
incorporated in a subsequently issued Change Order following negotiations as to its effect, if any, on Contract
Price or Contract Time.

Resident Engineer - The authorized representative of Engineer who is assigned to the site or any part thereof.

Resident Project Representative - Person acting as assistant to the Resident Engineer who is assigned to the site or any part thereof.

Resident Superintendent - The authorized representative of Contractor who is assigned to the site or any part thereof.

Restricted Period - The time period which runs from contract bid advertisement to contract approval by the New York State Office of the State Comptroller.

Retainage - A percentage of a Progress Payment withheld from a Contractor as assurance that all the contract requirements will be satisfactorily completed.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for Contractor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by Contractor to illustrate material or equipment for some portion of the Work.

Site - The area within the vertical boundaries of the location where the Contract Documents require Work by **Contractor**.

Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

Subcontractor - An individual, partnership, corporation, joint venture or other combination thereof, having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the site.

Substantial Completion - The Work, or a specified part thereof, has progressed to the point where in the opinion of Engineer as evidenced by Engineer's definitive Certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents (with the exception of the minor items identified during inspection described in paragraph 13.6 of the General Conditions), so that it can be utilized continuously for the purposes for which it is intended. Substantial Completion of the Work, or specified part thereof, may be achieved either upon completion of Pre-operational Testing or Start-up Testing, depending upon the requirements of the Contract Documents. The terms "substantially complete" and "substantially completed" as applied to any Work refer to Substantial Completion thereof.

Supplier - A manufacturer, fabricator, supplier, distributor, material man or vendor.

Testing, Pre-Operational - All testing, associated trimout activities and specified manufacturer or supplier training required prior to placing the facilities in service, including but not limited to manufacturer or supplier installation checks; leak, disinfection and pressure tests; removal or erection of temporary components; tie-ins; flushing and chemical/mechanical cleaning operations; specified performance tests; and other necessary non-operating adjustments, cold-alignment checks, corrections, housekeeping and spare parts stocking required of Contractor to demonstrate to Department and Engineer that individual components of the Work have been properly erected and do operate in accordance with the Contract Documents, and that they can be placed in service and utilized continuously for their intended purposes.

Testing, Start-Up - Follows Pre-operational Testing. Start-up Testing commences by placing portions of the Work in service under interim conditions, continues through initial utilization of the facilities under design media, and culminates with predefined trial utilization tests during which Contractor is to operate the Work, or specified parts thereof, under actual and simulated operating conditions and performing as defined in the Contract Documents, for the purposes of: a) making such minor adjustments and changes as may be found necessary to comply with the requirements of the Contract Documents, and b) complying with the Start-up Test requirements outlined in the Contract Documents.

Total Float - Number of working days by which a part of the Work identified in the progress schedule may be delayed without necessarily extending the corresponding Contract Time, or Contract Times.

Underground Facilities - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, chemicals, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Work - Any and all obligations, duties, responsibilities, labor, materials, equipment, temporary facilities, and incidentals, and the furnishing thereof necessary to complete the construction assigned to, or undertaken by Contractor pursuant to the Contract Documents. Also, the entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor, and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

SECTION III

Bidding Information and Requirements

ARTICLE 1 - Address for Notices

It is understood and agreed between the parties that **Department's** Representatives for the implementation of this Agreement, or for approval and direction called for therein, shall be the individuals named in Article 2 of Section IV, "Supplementary Bidding Information and Requirements."

Whenever it is provided in this Agreement that notice shall be given or other communications sent to **Department**, such notices or communications shall be delivered or sent to the Project Manager at the address set forth in Article 2 of Section IV, "Supplementary Bidding Information and Requirements." However, the Bid submittal should be addressed as stated in Article 3 below.

ARTICLE 2 - Interpretation of Bidding Documents

No interpretation of the meaning of the Bidding Documents will be made orally: all questions regarding the intent or meaning of the Bidding Documents shall be submitted in writing to the Project Manager at the address set forth in Article 2 of Section IV, "Supplementary Bidding Information and Requirements". The reply to the same, when deemed necessary, will be made available by Addenda. To be given consideration, all inquiries must be received in writing at the above address at least **ten** days prior to the date fixed for the opening of Bids. Any and all interpretations and any supplemental instructions will be in the form of written Addenda made available in electronic format. Failure of any Bidder to receive any such Addenda shall not relieve said Bidder from any obligation under its Bid as submitted. All Addenda so issued shall become part of the Bidding Documents.

All pre-bid inquiries answered by means other than Addenda shall not be binding.

ARTICLE 3 - Bid Instructions

Department invites sealed Bids on the forms attached hereto, and submitted in the envelopes provided to: Division of Management and Budget Services, New York State Department of Environmental Conservation, 10th Floor, 625 Broadway, Albany, New York, 12233-5027, **Attn.:** Bureau of Expenditures.

The outside of the envelopes must bear the name and address of the Bidder, the Project name and Project designation number from the cover of the specification book, and be clearly marked as "Bid."

Department may consider non-responsive any Bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or irregularities in or may reject any or all Bids. Bids that are illegible or that contain any omission, erasures, alterations, additions, conditions, or items not called for in the Bidding Documents or that contain other irregularities of any kind, may be rejected as non-responsive. The failure or omission of any Bidder to obtain or examine any form, instrument, document or Bidding Documents or any part thereof, shall in no way relieve any Bidder from any obligation in respect to its Bid. Complete sets of Bidding Documents shall be used in preparing Bids; neither **Department** nor **Engineer** assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

Department is responsible for providing Addenda only to those persons or firms listed as having attended the mandatory Pre-Bid Conference.

Department and **Engineer** make copies of Bidding Documents available only for the purpose of obtaining Bids on the Work and do not authorize any other use of the Bidding Documents.

Each Bid must be submitted on the official form which is furnished by **Department**. All blank spaces in the Bid must be filled in as noted, and no change shall be made in the phraseology of the Bid or in the items mentioned therein.

The Bidder shall sign, in the space provided in the Bid form, with his or her usual signature. An officer of a corporation or a member of a partnership signing for the Bidder, shall place his or her signature and title after the word "By" under the name of the **Contractor**. The same procedure shall apply to the Bid of a joint venture by two or more Bidders; however, if the signature is by an agent or attorney-in-fact for the joint venturers, then the Bid shall be accompanied by evidence of his or her authority to act on behalf of all of the joint venturers.

The Bidder shall complete that portion of the Bid form requesting a statement of the Addenda which have been received, by Addenda number and date. If no Addenda have been received, insert the word, "NONE." Failure to complete this portion of the Bid form may result in a bid being declared non-responsive at **Department's** option.

Each Bid shall specify in words and figures, the correct gross sum, in the manner hereafter described for which the Work shall be performed according to the Bidding Documents together with a unit price expressed in words and figures for each separate items for which such a price is required. The lowest Bid shall be determined by **Department** on the basis of the total sum for which the entire Work will be performed, arrived at by a correct computation of all items specified in the Bidding Documents at the prices stated in the Bid. **Department** reserves the right to reject any Bid in which the Bid prices appear to constitute an unbalanced Bid for the work.

In the event there is a discrepancy in any Bid between the unit prices and the extended totals, the unit prices shall govern. In the event there is a discrepancy in any Bid between the prices written in figures and the unit or lump sum prices written in words, the prices written in words shall govern. **Department** may reject as non-responsive bids which do not contain a price for every numbered item contained in the Bid form, or may insert a zero for every numbered item that doesn't contain a price.

Unless **Department** gives instructions to the contrary, the Bidder shall use no more than three decimal places in the cents column under unit Bid price items. If Bidder uses more than three decimal places without such instructions, **Department** may round off the Bid item to three decimal places.

The Bidder is responsible for examining supplemental information which is available for inspection at the address for notices in Article 1 of this Section.

Department will not accept any Bid which has been transmitted via Facsimile, Telephone, Telegraph or which has been received after the designated bid opening time except where there is evidence that the bid arrived on time, but was mishandled by the **Department**. A late Bid will be returned unopened with notification of the reason for non-acceptance.

Bids will only be accepted from persons or firms who have attended the mandatory Pre-Bid Conference.

Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying Influence - Pursuant to State Finance Law §§139-j and §139-k, this contract includes and imposes certain restrictions on communications between a Governmental Entity and an Offerer/Bidder during the procurement process. An Offerer/bidder is restricted from making contacts from the earliest notice of intent to solicit bids through final award and approval of the Procurement Contract by the Department of Environmental Conservation (Department) and, if applicable, Office of the State Comptroller ("restricted period") to other than designated staff unless it is a contact that is included among certain statutory exceptions set forth in State Finance Law §139-j(3)(a). Designated staff, as of the date hereof, is identified on page I-1 of Section I, Advertisement and Notice to Bidders. Department employees are also required to obtain certain information when contacted during the restricted period and make a determination of the responsibility of the Offerer/bidder pursuant to these two statutes. Certain

findings of non-responsibility can result in rejection for contract award and in the event of two findings within a 4 year period, the Offerer/bidder is debarred from obtaining governmental Procurement Contracts. Further information about these requirements, including a copies of the new lobbying law, can be found at http://www.ogs.state.ny.us/aboutogs/regulations/defaultAdvisoryCouncil.html.

ARTICLE 4 - Modification or Withdrawal of Bid

Permission will not be given to modify or explain by letter, telegram, telephone or otherwise, any Bid after it has been deposited with **Department** except that a Bid may be withdrawn, modified, and resubmitted prior to the date and time for opening the Bids. After such date and time, no Bid may be withdrawn by a Bidder except as provided by law, and provided further that: 1) the Bidder files a duly signed written notice of a Bid mistake with **Department** within two business days after the day of the Bid opening, and 2) within 3 business days thereafter demonstrates to the reasonable satisfaction of **Department** that there has been a material and substantial mistake in the preparation of the Bid. If these two conditions are not met, then the bid bond would be forfeited.

Prior to submittal of Bid, a Bidder may alter or correct a unit price, or a lump sum item, which has been entered on the Bid form by crossing out the entry, entering the new figure above or below the crossed-out entry, and initialing on the line of change. The crossing out of entries shall be with ink, or typed. All new entries and initials shall be legibly handwritten with ink, or typed. Any ambiguity arising from entries altered or corrected on the Bid Form may be cause for **Department's** rejection of the Bid as non-responsive.

If the Bid is made by an individual, the business address shall be given. If made by a corporation, the names and business addresses of the president, secretary and treasurer shall be given. If made by a partnership, the names and business addresses of the partners shall be given.

Department reserves the right to disqualify Bids, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of the Bidder.

All Bids submitted by an individual, firm or partnership, a corporation or association which submits more than one Bid for the same Work under the same or different name shall be rejected.

ARTICLE 5 - Required Bid Submittals

The following are to be submitted within the time periods indicated. At the option of **Department**, failure to make or amend a submittal will constitute proof that the Bidder has abandoned all rights and interests in the contract; that the Bid Security is forfeited to **Department** as liquidated damages; and that the Work may be awarded to another Bidder in a manner consistent with Law.

- a) The following items are to accompany Contractor's Bid submitted to the **Department** as required in Article
 3:
 - Form of Bid filled out
 - Bid Bond or Certified Check
 - Non-Collusion Certificate
 - MacBride Fair Employment Principles (signed)
 - Offerer's Affirmation of Understanding of and Agreement pursuant to State Finance Law §139-j (3) and § 139-j (6) (b) (signed)
 - Use of Best Available Retrofit Technology (BART) and Ultra Low Sulphur Diesel (ULSD) Provision (signed)
 - Offerer Disclosure of Prior Non-Responsibility Determinations (signed)
- b) The following items shall be submitted to the Project Manager within **5 days** of notification that the Bidder is the apparent low Bidder:
 - Off-site permitted facility to receive material along with a copy of the facilities permit
 - Plan of Operations (Work Plan) and Progress Schedule, Health and Safety Plan, Sampling Plan, and QA/QC Plan
 - Statement of Surety's intent, complete and signed by and duly authorized surety company licensed to do business in the State of New York
 - A copy of the proposed site Pollution Liability insurance policy demonstrating that the bidder has the required \$1 million of Pollution Liability insurance and the additional \$4 million (for a total of \$5 million) of Pollution Liability insurance if required by the **Department** on a specific project basis. If the Bidder is unable to obtain the \$4 million of site specific Pollution Liability insurance, Department requires letters from three (3) sureties stating that the additional Pollution Liability insurance is unavailable.
 - A description of projects completed by Bidder documenting its experience in this type of work
 - Proof of Availability of insurance or Certificate of insurance with endorsements including written verification that the insurance carrier(s) are licensed in New York State. Licensed insurance carriers can be verified at http://www.ins.state.ny.us/. If the Contractor proposes to use non-admitted carrier(s) for pollution or professional liability insurance, then three declinations on forms required by New York State Insurance Regulation 41 (i.e., Part A Affidavit by Excess Line Broker or Part C Affidavit by Producing Broker) must be submitted. Pollution or professional liability insurance provided by excess line carriers shall be from a carrier who is a member of the Excess Line Association of New York (ELANY). All other insurance must be through carriers licensed to do business in New York State. All carriers must be properly identified by complete name, address, National Association of Insurance Commissioners (NAIC) number and whether or not they are a member of ELANY (if applicable) in the submittal. Refer to Article 4, Bonds and Insurance, of the General Conditions for additional information.

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- Completed NYS Vendor Responsibility Questionnaire (CCA-2) or an affidavit of no change (if appropriate). If the forms are filed using OSC's online VendRep System a letter, certifying that the forms have been so completed and submitted, must be sent to the Project Manager.
- M/WBE Workplan. If the forms are filed using the Department's electronic M/WBE System a letter, certifying that the forms have been so completed and submitted must be sent to the Project Manager.
- Any other information that demonstrates the Bidder's ability to perform the work described herein
- Low bidders may be asked to submit additional information to demonstrate competency
- c) The following items shall be submitted to the Project Manager within **14 days** from the date of the Notice of Intent to Award letter from **Department**:
 - Executed Agreement (four copies with original signatures)
 - Performance Bond with Power of Attorney & Surety Financial Statement (original and three copies)
 - Labor & Materials Bond with Power of Attorney & Surety Financial Statement (original & three copies)
 - Bid Breakdown of Items (original)
 - Certificates of Insurance (original and three copies)
 - Consultant/Contractor Detailed M/WBE-EEO Utilization Plan (original). If the forms are filed using the Department's electronic M/WBE System a letter, certifying that the forms have been so completed and submitted must be sent to the Project Manager.

ARTICLE 6 - Bid Security and Bonds

Bid Security shall be made payable to **Department** in an amount not less than five percent (5%) of the Bidder's gross sum Bid. The Bid Security shall be in the form of either a certified or bank check upon an incorporated bank or trust company, or a Bid Bond issued by a surety satisfactory to **Department**.

Department will accept only Bonds from a surety company licensed to write Bonds of such character and amount under the laws of New York State and which are listed on the U.S. Treasury Department Circular 570.

Attorneys-in-fact who sign Bonds shall file with such Bonds a certified copy of their Power of Attorney to sign Bonds and to conduct business in the State of New York.

The Bid Security of a Bidder awarded a Contract for the Work will be retained until such Bidder has executed the Agreement and furnished the required bonds and insurance, whereupon the Bid Security will be returned. If the Bidder fails to execute and deliver the Agreement, other required documents and furnish the required bonds and insurance within fourteen (14) days after the Notice of Intent to Award, **Department** may annul the Notice of Intent to Award, and the Bid Security of that Bidder will be forfeited to **Department**. The Bid Security of any Bidder whom **Department** believes to have a reasonable chance of receiving the award may be retained by **Department** until the earlier of the 45th day after the Bid opening or seven (7) days after the Effective Date of the Agreement, whereupon Bid Security furnished by such Bidders will be returned. Bid Security of other Bidders will be returned after the Bid opening.

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ARTICLE 7 - Approval of "or Equal" or Substitution Equipment, Systems or Items

There shall be no approval given by **Engineer** during the bidding period or prior to Award of Contract for any "or equal" or substitution equipment, systems or items.

ARTICLE 8 - Other Contracts and Occupancy

Department may award other contracts in connection with this Work. **Contractor** shall not have exclusive occupancy of the real property within or adjacent to the limits of the Work.

In case of interference between the operations of utility owners and different contractors, **Department** will be the sole judge of the rights of each contractor and the sequence of work necessary to expedite the completion of the entire Project. In all such cases, **Department's** decision shall be accepted as final.

ARTICLE 9 - Taxes

Department is exempt from the payment of sales and compensating use taxes of the State of New York and of cities and counties on all materials, equipment and supplies sold to **Department** pursuant to this Contract. Also exempt from such taxes are purchases by **Contractor** and its Subcontractors of materials, equipment and supplies to be sold to **Department** pursuant to this Contract, including tangible personal property to be incorporated in any structure, building or other real property forming part of the Project. These taxes are therefore not to be included in the Bid. The cost of all other taxes under the Contract shall be included in the Bid prices for the several items of the Contract.

ARTICLE 10 - Experience and Financial Statements

In accordance with New York State Executive Order No. 170, a Contract shall only be awarded to a responsible Bidder capable of performing and completing the Work in a satisfactory manner. The NYS Vendor Responsibility Questionnaire, instructions for which are included in Section V, "Bid Forms and Attachments" must be completed and submitted by the apparent low Bidder within five (5) days after the apparent low Bidder has been so notified.

Failure of the apparent low Bidder to timely submit the complete, properly executed questionnaire within five (5) days may result in disqualification.

Before **Department** will consent to any subcontracts over \$10,000, the proposed subcontractor must submit the complete, properly executed "NYS Vendor Responsibility Questionnaire" through **Contractor**. Any delay in the progression of work caused by the failure of a subcontractor to comply with these requirements will be attributable to **Contractor** and any additional costs will be **Contractor**'s responsibility.

The low Bidder shall demonstrate its responsibility to perform and complete Work by submitting a statement of its experience and the experience of any Subcontractor which the low Bidder intends to use to perform the Work. **Department** may require the low Bidder to further demonstrate its responsibility to perform and complete Work by submitting an additional experience and financial statement or information seven (7) days after bid opening or within seven (7) days of **Department** request, which shall include at a minimum, information pertaining to the Bidder's financial resources. The submitted financial information shall be certified by a Certified Public Accountant, and shall be submitted in the form required by **Department**. This can also apply to **Contractor's** subcontractors.

ARTICLE 11 - Preliminary Progress Schedule

The Preliminary Progress Schedule shall consist of three copies of a narrative description and a time-scaled critical path method diagram or bar chart diagram as specified in the Contract Documents. The narrative in the Preliminary Progress Schedule shall describe the order in which Bidder proposes to perform the Work pursuant to the specified Contract Time(s) and Work sequence conditions indicated in or required by the Bidding Documents. It shall also indicate proposed starting and completion dates for Work expressed in terms of days elapsed from the Notice to Proceed associated with each division of the Specifications within each major structure or geographical area of Work. Activities shall further identify significant submittals, approvals and associated deliveries, significant testing, major **Department** responsibilities, and responsibilities of affected utilities and third parties. The narrative shall include monthly percentages of completion for the Work in relation to the rate of progress anticipated in the Preliminary Progress Schedule.

ARTICLE 12 - Bid Breakdown

The Bid breakdown shall be submitted by the apparent low Bidder within fourteen (14) days after the date of the Notice of Intent to Award letter. Discrepancies, ambiguities or conflicts in the Bid breakdown shall be resolved in accordance with the terms and conditions set forth in Article 8.10 of Section VIII the General Conditions.

A Bidder submitting a Bid breakdown and awarded a Contract for the Work agrees and understands that those prices for separable parts of the Work disclosed on the Bid breakdown, where they are applicable and determined to be reasonable by **Department** may be used for the purposes of: a) measurement and payment, b) increase(s) or decrease(s) in the Contract Price due to adjustments in quantities to the separable parts of the Work, and c) Change Orders or Proposed Change Orders which add or deduct like Work.

ARTICLE 13 - Subsurface and Technical Information

If boring logs and other subsurface information were made available for the inspection of Bidders, please note that such data were obtained with reasonable care and were recorded in good faith by **Department**, **Engineer** or the **Design Engineer**.

The soil and rock descriptions shown are as determined by a visual inspection of the samples from the various explorations unless otherwise noted. The observed water levels and/or water conditions indicated thereon are as recorded at the time of the exploration. These levels and/or conditions may vary considerably, according to the prevailing climate, rainfall and other factors, including the passage of time.

Similarly, data concerning leachate were obtained with reasonable care and recorded in good faith. The location and concentrations of leachate may vary considerably according to the prevailing climate, rainfall and other factors, including the passage of time. Bidders may rely upon accuracy of the subsurface technical data as to where (location) and when (exact time) data was obtained; but not upon non-technical data, interpretations or opinions contained therein or for the completeness thereof.

When reports showing data obtained by investigations and tests at the site by **Department**, **Engineer** or the **Design Engineer** are included with the Bidding Documents, or made available to Bidders as set forth in the Bidding Documents, it is expressly understood and agreed that technical data, but not any non-technical data, interpretations or opinions contained in such reports, are incorporated by reference into the Contract Documents. Bidders may rely upon the accuracy of all such technical data contained in such reports as to where (location) and when (exact time) such technical data was obtained, unless the Bidding Documents limit any other basis upon which such technical data may be relied upon. It is further expressly understood and agreed that the use of any technical data contained in such reports is subject to all of the conditions and limitations set forth in the Bidding Documents.

Subsurface and technical information is made available to Bidders in good faith so that they may be aware of the information utilized for design and estimating purposes. **Department** makes no representations or warranties, express or implied, as to the completeness of this information or data, nor is such disclosure intended as a substitute for personal investigations, interpretations, and judgment of the Bidder.

ARTICLE 14 - Underground Facilities

The locations of Underground Facilities were ascertained with reasonable care and recorded in good faith from various sources, including the records of municipal and other public service corporations, and therefore such locations may only be approximate. **Department** does not assume responsibility for the accuracy or completeness of such locations.

ARTICLE 15 - Examination of Bidding Documents and Site

It is the responsibility of each Bidder, before submitting a Bid to: a) examine the Bidding Documents thoroughly, b) visit and visually inspect the site during the Pre-Bid Conference required pursuant to Article 3 of Section IV, "Supplementary Bidding Information and Requirements," c) become familiar with local conditions that may affect cost, schedule, performance or furnishing of the Work, d) become familiar with applicable Laws that may in any manner affect cost, schedule, performance or furnishing of the Work, e) study and carefully correlate Bidder's observations with the Bidding Documents, and f) notify the Project Manager identified in Article 1 of this section promptly after discovering any conflicts, ambiguities, errors or inconsistencies in the Bidding Documents.

It is the responsibility of each Bidder to obtain any additional documents, information or data which pertain to the physical conditions (surface, subsurface and Underground Facilities) at or contiguous to the site which may affect cost, schedule, progress, performance or furnishing of the Work and which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the Bidding Documents.

The submission of a Bid constitutes an incontrovertible representation by Bidder that Bidder has taken steps reasonably necessary to ascertain the nature and location of the Work, and that Bidder has investigated and accounted for in the preparation of the Bid: a) Governmental requirements and all reasonably foreseeable general and local conditions that may affect cost, schedule, performance or furnishing of the Work. Examples of such conditions include: 1) conditions bearing upon the transportation, disposal, handling and storage of materials, 2) the availability and suitability of labor, water, electric power, telephone, sanitary services, and roads, 3) weather, river stages, tides or similar conditions at or contiguous to the site, 4) physical conditions of the site, and 5) the character of equipment and facilities needed preliminary to and during Work performance, b) character, quality and quantity of surface, subsurface and Underground Facilities at or contiguous to the site insofar as this information is reasonably ascertainable from the Drawings and Specifications included as part of the Bidding Documents, from the reports referenced in the Supplementary Bid Information and from the documents, information and data regarding physical conditions at or contiguous to the site obtained by Bidder, and c) Bidding Documents to be sufficient in scope and detail to indicate and convey understanding of all terms and conditions affecting cost, schedule, performance and furnishing of the Work.

Any Failure to take the actions described in this Article will not relieve that Bidder from responsibility for estimating properly the difficulty, cost of, and schedule for successfully performing the Work, or from performing the Work successfully without an increase in Contract Price or an extension in Contract Time.

Department, **Engineer**, or **Design Engineer** do not assume any responsibility for any conclusions or interpretations made by any Bidder based on the information made available by the Bidding Documents. Nor does **Department**, or **Engineer** assume any responsibility for any understanding reached or representation made concerning conditions which can affect the cost, schedule, progress, furnishing and performance of the Work prior to execution of the Contract, unless that understanding or representation is expressly stated in the Bidding Documents.

In an itemized contract, the estimate of quantities of work to be done and materials to be furnished is approximate and is given only as a basis of calculation upon which the award of the contract is to be made. **Department** does not assume any responsibility that the quantities estimated will be the actual quantities required; **Contractor** may not claim misunderstanding or deception because of such estimates of quantities or of the character of the work, location, or other condition pertaining thereto. **Department** may increase or diminish any or all of the quantities of work mentioned above or omit any of them, as deemed necessary.

ARTICLE 16 - Subcontractors, Suppliers or Others

Unless otherwise agreed in writing by **Department**, **Contractor** shall subcontract no more than the percentage (%) of the total cost of the work under its contract as may be provided by the Contract Documents in Article 6 of Section IV, "Supplementary Bidding Information and Requirements". Procedures for approval of Subcontractors, Suppliers or other persons or organizations, after execution of the Agreement, are set forth in the General Conditions and the Supplementary Conditions.

ARTICLE 17 - Award of Contract

The Contract(s) will be awarded to the lowest, responsive and responsible Bidder(s) that has prepared acceptable required submittals, in the opinion of **Department**, as stipulated in Article 5 of this Section.

To the extent permitted by applicable Law, **Department** reserves the right to reject any and all Bids, to waive any and all informalities or irregularities, to disregard all nonconforming, nonresponsive, or conditional Bids, or to readvertise for Bids.

In order to be considered responsive, a Bid shall be completed, signed and be responsive in all respects to the Bidding Documents unless informalities are waived by **Department**.

In order to be considered responsible, a Bidder must establish to the complete satisfaction of **Department** and **Engineer**, as a minimum, that it has adequate and satisfactory experience and financial resources to meet the obligations under the Contract and award of the Contract would be in the best interest of the State. A Bidder's prior experience shall be considered satisfactory when among other factors, its performance of prior work was timely, of good quality, in compliance with any contract requirements including contracted costs and schedule, and in compliance with applicable Law. The Bidder must have a minimum of three (3) years satisfactory experience in construction of the work to be performed.

Department may conduct such investigations as it deems necessary to assist in the evaluation of any Bid and to establish the responsibility in terms of satisfactory experience and financial ability of the Bidder, and of any proposed subcontractors. **Department** may reject the Bid of any Bidder which it deems not to be responsible and may reject performance of Work by any Subcontractor which it deems is not responsible.

It is the intention of **Department** that the work will be awarded within 45 calendar days after the opening of bids to the lowest responsive, responsible Bidder whose bid conforms to the requirements of the Contract Documents. Bids may not be withdrawn, altered or revoked during this 45 day period except as provided by law and specified within Article 4. Even after the expiration of such 45 day period, **Department** may accept a Bid and award the work to any Bidder whose bid has not been unequivocally withdrawn or revoked prior to the mailing of written Notice of the Award to the successful Bidder. For purposes of the preceding sentence, withdrawal or revocation of a Bid shall not occur until **Department** receives an unequivocable written statement to that effect.

ARTICLE 18 - Time is of the Essence

Time is of the essence for the performance of Work required by the Contract Documents.

ARTICLE 19 - Applicability of Federal, State and Local Law

Any Bid and any contract awarded pursuant to a Bid shall be subject to and governed by applicable Law.

It is the responsibility of each Bidder to be informed of and comply with Federal, State and local Laws, affecting the cost, schedule, progress, performance or furnishing of the Work. This requirement includes, but is not limited to, applicable regulations concerning minimum wages, nondiscrimination in employment, affirmative action, protection of public and employee safety and health, environmental protection, fire protection and permits, and fees and licensing.

ARTICLE 20 - M/WBE and EEO Requirements

The M/WBE and EEO provisions of Appendix B are required provisions for this contract. The Bidder is required to comply with State regulations 9NYCRR Part 543 entitled, "Requirements and Procedures Regarding Business Participation Opportunities for Minorities and Women on State Contracts."

The selected Bidder shall be required to make good-faith efforts to subcontract at least the percentage stipulated in Section VII Appendix B, of the contract price to NYS Certified Minority Business Enterprise(s) (MBE) and Women Business Enterprise(s) (WBE), respectively.

In accordance with Executive Law Article 15-A, **Department** is required to make available the NYS Directory of Certified Minority and Women Owned Business Enterprises. Empire State Development has put the Minority and Women's Business Development Directory on the Internet at www.empire.state.ny.us. Support will be available from 9:00 a.m. to 5:00 p.m., Monday through Friday, except for NYS holidays. If assistance is needed call (518) 474-1979. For additional information and assistance regarding NYS Certified M/WBE's, please contact the Department's Minority and Women's Business Programs Unit at (518) 402-9311.

Pursuant to New York State Executive Law Article 15-A and the attending rules and regulations, an approvable M/WBE and EEO Workplan shall be required within two weeks of the award of a contract. The workplan is requested to state the M/WBE and EEO goals, the areas of work to be considered for solicitation of M/WBE firms, and a listing of M/WBE firms to be used to supply identified subcontracting work/supplies. A Contractor Detailed EEO and M/WBE Workplan form is included and shall be incorporated into the contract.

Contractor shall be required to provide equal opportunities to minorities and women with regard to all jobs necessary for the performance of work or contracts required by the project. In doing so, Contractor agrees to make good-faith efforts to employ minorities and women for at least the percentage stipulated in Section VII Appendix B, of the work force hours required for the completion of the project. Different occupational category work force participation goals may be used to meet these overall goals for work force participation. Contractor shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability, or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons and women are afforded equal opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on-the-job training.

As required by **Department**, **Contractor** shall request of each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding and which is involved in the performance of the contract with the Agency to furnish a written statement that such employment agency, labor union, or representative shall not discriminate because of race, creed, color, national origin, sex, age, disability, or marital status, and that such union or representative will cooperate in the implementation of **Contractor's** obligations hereunder.

Contractor shall include the provisions of Appendix B (VII) in every subcontract or purchase order in such a manner that the subcontractor shall be required to comply with such provisions with respect to its work in conjunction with the contract with **Department**.

ARTICLE 21 - Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying Influence

Chapter 1 of the Laws of 2005, as amended by Chapter 596 of the Laws of 2005 (collectively referred to as the "Lobbying Law"), makes major changes to the Legislative Law and State Finance Law relative to lobbying on government procurements. More specifically, the Lobbying Law creates two new sections in the State Finance Law: Section 139-j addresses restrictions on "contacts" during the procurement process; and Section 139-k addresses the disclosure of contacts and the responsibility of offerers during the procurement process. The Lobbying Law applies to all procurements initiated on or after January 1, 2006. In this regard, a procurement means a contract or agreement involving an annual expenditure in excess of \$15,000 for a commodity, service, technology, public work, or construction; purchase, sale or lease of real property; or revenue contract.

In conformity with the Lobbying Law, during a procurement's restricted period² the only New York State Department of Environmental Conservation (Department) officer(s) or employee(s) that the offerer may "contact" is/are the Department designated contact person(s) for that procurement. In this regard, "contact" means any oral, written, or electronic communication under circumstances where a reasonable person would infer that the communication was intended to influence a procurement. Exceptions to this rule include:

- submission of a written proposal in response to an RFP, IFB or any other solicitation method;
- submission of written questions as part of an RFP, IFB or other solicitation method where all written questions and written responses will be provided to all offerers;
- participation in a pre-proposal or pre-bid conference scheduled as part of an RFP, IFB or other solicitation process;
- written complaints by an offerer that the Department designated contact for a procurement fails to respond to in a timely manner;
- negotiations with the Department following tentative award;
- contacts between designated Department staff and offerer to request the review of a contract award;
 and
- communications with the Department regarding an appeal, protest or other review of a procurement, participation in an administrative or judicial proceeding regarding a procurement, and complaints regarding a procurement made to the Attorney General, Inspector General, District Attorney, or State Comptroller.

An offerer shall not, under any circumstances, attempt to influence a Department procurement in a way that violates or attempts to violate: Public Officers Law Section 73(5), relating to gifts intended to influence; or Public Officers Law Section 74, relating to the code of ethics for employees of state agencies, public authorities and public benefit corporations, members of the New York State Legislature, and Legislative employees.

An offerer who contacts the Department designated contact person for a procurement during the restricted period must be prepared to provide the following information: name, address, telephone number, place of principal employment and occupation of the person or organization making the contact, and whether the person/organization making the contact is the offerer or is retained, employed or designated by or on behalf of the offerer to appear before or contact the Department about the procurement.

¹ Individual or entity, or any employee, agent, consultant or person acting on behalf of such individual or entity, that contacts the Department about a procurement during the restricted period.

² The period of time commencing with the earliest public notice, advertisement or solicitation of a Request for Proposals (RFP), Invitation for Bids (IFB), solicitation of proposals or any other method for soliciting responses from offerers intending to result in a procurement contract by the Department, and ending with the final contract award and approval by the Department, and the Office of the State Comptroller (if required).

An offerer that submits a proposal, bid or other response to a Department RFP, IFB or other solicitation method must: certify that it understands and agrees to comply with these guidelines regarding permissible contacts during a procurement and the prohibition of inappropriate lobbying influence; and disclose whether any governmental entity has, within the prior four years, found the offerer non-responsible due to a violation of the Lobbying Law or the intentional provision of false or incomplete information. Further, all Department procurement contracts will contain: a certification by the offerer that all information provided to the Department with respect to the Lobbying Law is complete, true and accurate; and a provision authorizing the Department to terminate the contract in the event such information is found to be intentionally false or incomplete.

The Department will investigate all allegations of violations of the Department guidelines regarding permissible contacts during a procurement and the prohibition of inappropriate lobbying influence. A finding that an offerer has knowingly and willfully committed such a violation may result in a determination that the offerer and its subsidiaries are non-responsible and therefore ineligible for award of the procurement contract. A second determination of non-responsibility for such a violation within four (4) years of the first such determination may render the offerer and its subsidiaries ineligible to submit a bid or proposal or be awarded a procurement contract for four (4) years from the date of the second determination. The Department will notify the New York State Office of General Services (OGS) of any determination of non-responsibility or debarments due to violations of the Lobbying Law.

If you require further guidance on the new Lobbying Law, you are encouraged to visit the Advisory Council on Procurement Lobbying website at the following address:

http://www.ogs.state.ny.us/aboutOgs/regulations/defaultAdvisoryCouncil.html, where Frequently Asked Questions (FAQ's) and answers adopted by the council have been posted. A copy of the new Procurement Lobbying Law is also available on this website.

SECTION IV

Supplementary Bidding Information and Requirements

ARTICLE 1 - Location and Description of Project

The Site Number of this project is 712009. The Project is located in the Town of Cortlandville in Cortland County. Access to the site is from South Hill Road via US Route 11.

This Project includes waste consolidation and the construction of a clean soil cover over all fill areas approximately 2.5 acres in size.

ARTICLE 2 - Department Representatives

NAME ADDRESS

Michael J. Cruden, Designated Representative, Rem. Bur. E, 625 Broadway, 12 Fl., Albany, NY 12233-7017

Gerard W. Burke, Section Chief, Rem. Bur. E, 625 Broadway, 12 Fl., Albany, NY 12233-7017

David J. Chiusano, Project Manager, Rem. Bur. E, 625 Broadway, 12 Fl., Albany, NY 12233-7017

To Be Determined, Project Field Representative, Rem. Bur. E, 625 Broadway, 12 Fl., Albany, NY 12233-7017

ARTICLE 3 - Pre-Bid Conference

A pre-Bid conference will be held on <u>Thursday</u>, <u>April 7</u>, <u>2011</u>, <u>at the Site at 11:00 A.M.</u> to view the Project area. The pre bid conference is held to discuss the requirements of the Bidding Documents, the protocols for performing the work and the conditions existing at the work site, and to provide for visual inspection of the Site by Bidders. Bidders will be required to sign an attendance sheet to document their presence at the mandatory pre-bid conference. <u>Department will accept Bids only from those bidders who attend this conference</u>.

ARTICLE 4 - Additional Bid Submittals

None

ARTICLE 5 - Other Available Documents

Please refer to the Limited Site Data Document for this project.

ARTICLE 6 - Subcontracting

The maximum subcontracting allowed for this contract is **40 percent** unless a higher percentage is approved by **Department** in writing.

ARTICLE 7 - Type of Schedule

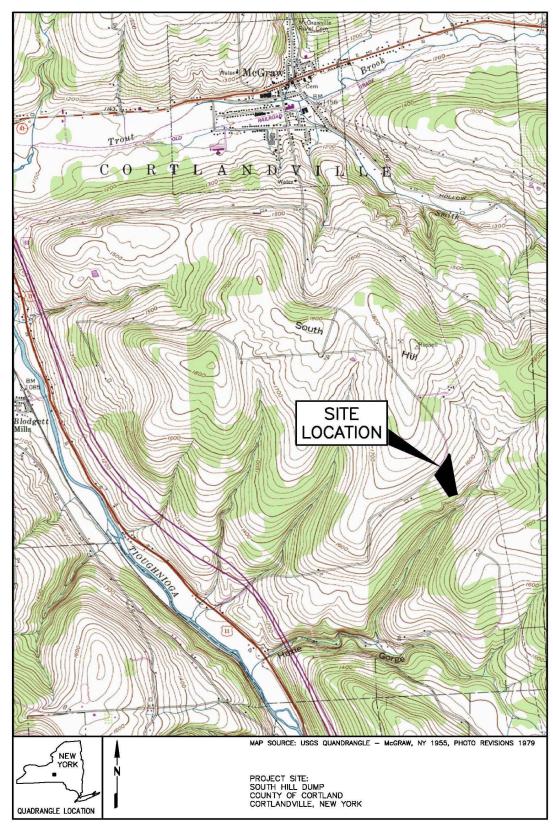
Contractor shall provide a critical path type of schedule as described in Section X, Spec 00001 - Progress Schedule.

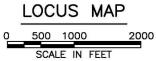
ARTICLE 8 - Wage Rates

The Department requires, for the work under this contract, that the Contractor and its subcontractor pay at least the prevailing wage rate and pay or provide the prevailing supplements, including premium rates for overtime pay, as issued by the State Labor Department. The current wage rates are included within the contract documents, Section XIII.

"The Contractor is responsible for any additional costs related to new determinations of the wage rates. The annual determination of the prevailing rates of wages and supplements are usually published on May 31st of each year and are in effect July 1st through June 20th. New determinations will supersede the original schedule or any prior issued annual determination. Any rate change from a previously issued determination becomes effective July 1st, regardless of whether the new determination has been received by the Contractor.

Every contractor and subcontractor shall submit to the Engineer within thirty days after issuance of its first payroll, and every thirty days thereafter, a transcript of the original payroll records, subscribed and affirmed as true under penalty of perjury, as provided by Article 8, Section 220, of the NYS Labor Law. The Engineer shall receive and maintain such payroll records. The original payrolls and transcripts must be preserved for three years from the date of completion of the project. The current prevailing wage rate schedule must be posted in a prominent and accessible place on the site of the public work project."





SECTION V

ARTICLE 1(a) - Contract Bid Form and Acknowledgment for Construction of

Clean Soil Cover at the South Hill Dump Site

Contract Number: D007992, NYS Site Number: 712009

To The New York State Department of Environmental Conservation

The Bidder hereby declares that either personally or through authorized representative(s), Bidder has carefully examined all Bidding Documents and has personally or through authorized representative(s) inspected the actual location of the work, together with the local sources of supply; and understands all terms and conditions of Bidding Documents. Bidder further understands that in signing this Bid, the right to plead any misunderstanding regarding the same is waived.

Pursuant to and in compliance with the Bidding Documents, the Bidder hereby offers to furnish all labor, materials, supplies, equipment and other facilities and things necessary or proper for, or incidental to the construction and completion of this Contract, as required by and in strict compliance with the applicable provisions of all Contract Documents, for the following unit and/or lump sum prices.

The undersigned shall meet the required submittal time periods listed in Article 5 - Required Bid Submittals of the Bidding Information and Requirements, Section III.

The undersigned hereby designates the following office as the office to which such Notice of Intent to Award and Notice of Award may be mailed, telegraphed or delivered:

ttn:-	
ompany	
ddress 1	
ddress 2	
ity, State, Zip Code+4	
ax Number ()	
-mail Address	

New York State Department of Environmental Conservation South Hill Dump Site Remedial Action Contract Number D007992, NYS Site Number 712009

LUMP SUM ITEMS

Payment Item Number	Description	Unit	Estimated Quantity	Unit or Lump Sum Price		Total Amount (\$)
				Words	Figures	
LS-1	Mobilization/Demobilization (limited to 7.5% of Bid)	Lump Sum	1			
LS-2	Site Survey	Lump Sum	1			
LS-3	Construction Water Management	Lump Sum	1			
LS-4	Site Preparation	Lump Sum	1			
LS-5	On-Site Waste Consolidation	Lump Sum	1			

	Total Page V-2A: \$	
		(Price in Figures)
Contractor Authorized Representative	Contractor Name	Date

06/06

New York State Department of Environmental Conservation South Hill Dump Site Remedial Action Contract Number D007992, NYS Site Number 712009

LUMP SUM ITEMS

Payment Item Number	Description	Unit	Estimated Quantity	Unit or Lump Sum Price		Total Amount (\$)
				Words	Figures	
LS-6	Subgrade Preparation	Lump Sum	1			
LS-7	Landfill Cover System	Lump Sum	1			
LS-8	Final Site Work	Lump Sum	1			
LS-9	Groundwater Monitoring Wells	Lump Sum	1			
LS-10	ALTA Survey	Lump Sum	1			

	Total Page V-2B: \$			
		(Price in Figures)		
ontractor Authorized Representative	Contractor Name	Date		

06/06

New York State Department of Environmental Conservation South Hill Dump Site Remedial Action Contract Number D007992, NYS Site Number 712009

UNIT PRICE ITEMS

Payment Item Number	Description	Unit	Estimated Quantity	Unit or Lump Sum Price		Total Amount (\$)
				Words	Figures	
UC-1	Site Services (limited to 7.5% of Bid)	Day	180			
UC-2	Health and Safety	Day	150			
UC-3	Confirmation Sampling/Testing	Each	300			
UC-4	Documentation Sampling/Testing	Each	30			
UC-5	Bulky Waste- Metal Removal and Off-Site Transportation and Disposal	Ton	44			

	Total Page V-3A	A: \$
		(Price in Figures)
Contractor Authorized Representative	Contractor Name	Date

V-3A

06/06

New York State Department of Environmental Conservation South Hill Dump Site Remedial Action Contract Number D007992, NYS Site Number 712009

UNIT PRICE ITEMS

Payment Item Number	Description	Unit	Estimated Quantity	Unit or Lump Sum Price		Total Amount (\$)
				Words	Figures	
UC-6	Bulky Waste- Tire Removal and Off-Site Transportation and Disposal	Ton	3.5			
UC-7	Bulky Waste- Miscellaneous Removal and Off-Site Transportation and Disposal	Ton	52			
UC-8	Excess On-Site Waste Consolidation	Cubic Yards	1,000			
UC-9	Imported Subgrade Fill	Ton	3,050			

	Total Page V-3B: S	\$
		(Price in Figures)
Contractor Authorized Representative	Contractor Name	Date

V-3B

06/06

New York State Department of Environmental Conservation South Hill Dump Site Remedial Action Contract Number D007992, NYS Site Number 712009

UNIT PRICE ITEMS

Payment Item Number	Description	Unit	Estimated Quantity	Unit or Lump Sum Price		Total Amount (\$)
				Words	Figures	
UC-10	Solid Waste Off-Site Transportation and Disposal	Ton	182			
UC-11	Hazardous Waste Drum Removal and Off-Site Transportation and Disposal	Each	5			

	Total Page V-3C: \$		
		(Price in Figures)	
	Grand Total Bid: \$		
	(Pages V-2A, V-2B, V-3A, V-3B, and V-3C)	(Price in Figures)	
Contractor Authorized Representative	Contractor Name	Date	
	V-3C		

06/06

The undersigned acknowledges the receipt of the following Addenda and agrees to be bound by all Addenda whether or not listed herein.

	Addendum Number	Date of Addendum
certified check this proposal sh	or checks, and \$all be accepted by Departn	in the amount of \$; said security is in the form of \$ Bid Bond which shall become the property of the Department if nent , and the undersigned shall fail to execute and return the contract the requirements of the Bidding Documents.
Corporate Sea (If no seal, writ	al te "No Seal" and sign)	Legal Name of Person, Partnership or Corporation By
		Print Name
		Signature
		Date
	Please Compl	ete Information Requested Below:
The P.O. addre	ss of the bidder is:	
Federal Identifi	cation Number is:	
		If a Corporation
Name		Address
·	, President	
	, Secretary _ , Treasurer _	
		If a Partnership
Name		Address
	, President	
	, Secretary , Treasurer	

(ACKNOWLEDGMENT)

State of _)
	s.s.:
County of)
	_day ofin the year, before me, the undersigned notary public, personally appeared , personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s
whose nar	es(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same
in his/her/	eir capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upo
behalf of	nich the individual(s) acted, executed the instrument.
	Notary Public

Contract Number: D007992

Bidder's/Proposer's Certification (Page 1 of 2)

Non-Collusive Bidding and Nondiscrimination in Employment in Northern Ireland MacBride Fair Employment Principles

BY SUBMISSION OF THIS BID AND BY SIGNING HEREUNDER THE BIDDER/PROPOSER, AND EACH PERSON SIGNING ON BEHALF OF SUCH PARTY CERTIFIES, AND IN THE CASE OF A JOINT BID/PROPOSAL, EACH PARTY THERETO CERTIFIES AS TO ITS OWN ORGANIZATION, UNDER PENALTY OF PERJURY, THAT TO THE BEST OF HIS/HER KNOWLEDGE AND BELIEF:

Article 1(b) - Non Collusion, State Finance Law §139-d

- 1) The prices in this Bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor;
- 2) Unless otherwise required by law, the prices which have been quoted in this Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other Bidder or to any competitor; and
- 3) No attempt has been made or will be made by the Bidder to induce any other person, partnership or corporation to submit or not to submit a Bid for the purpose of restricting competition.

Article 1(c) - <u>MacBride Fair Employment Principles</u>, State Finance Law §165(5)

	Date	Print Name and Title
	NOTE: All references to "bid" "bidde	r" shall be deemed to include "proposer" "proposal"
	Yes or No (check answer)	
3)	Shall take lawful steps in good faith to conduct any business operations that it has in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to non-discrimination in employment and freedom of workplace opportunity, regarding such operations in Northern Ireland and shall permit independent monitoring of its compliance with such Principles. (Check Answer):	
	Yes or No (check answer) If	yes, complete #3
2)	Has business operations in Northern Ire	eland:
1)	ownership interest, or any individual or	which the Bidder/Proposer holds a 10% or greater legal entity that holds a 10% or greater ownership in the r no to one or both of the following, as applicable).

Signature

Contract Number: <u>D007992</u>

Bidder's/Proposer's Certification (Page 2 of 2)

Offerer's Affirmation of Understanding of and Agreement Pursuant to State Ethics Law Provision and State Finance Law §139-j (3) and §139-j (6) (b)

BY SUBMISSION OF THIS BID AND BY SIGNING HEREUNDER THE BIDDER/PROPOSER, AND EACH PERSON SIGNING ON BEHALF OF SUCH PARTY CERTIFIES, AND IN THE CASE OF A JOINT BID/PROPOSAL, EACH PARTY THERETO CERTIFIES AS TO ITS OWN ORGANIZATION, UNDER PENALTY OF PERJURY, THAT TO THE BEST OF HIS/HER KNOWLEDGE AND BELIEF:

Article 1(d) - State Ethics Law Provision

By submittal of this bid, the undersigned hereby certifies, for and on behalf of the bidder, that he is familiar with the following provisions of the State Ethics Law provisions applicable to post employment restrictions affecting former state employees: POL §73(8)(a)(i) the two year ban, and §73(8)(a)(ii), the life time bar, and that submittal of this bid is not in violation of either provision, and that no violation will occur by entering into a contract or in performance of the contractual services, and further that the bidder recognizes that the Department may rely upon this certification.

Except as follows: (attach information if needed)

(Proposer is to make full disclosure of any circumstances which could affect its ability to perform in complete compliance with the cited laws. Any questions as to the applicability of these provisions should be addressed to the New York State Ethics Commission, 39 Columbia Street, Albany, NY 12207:telephone #1-800-87-ETHICS.)

Article 1(e) - <u>Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying</u> Influence, State Finance Law §139-j and §139-k

Offerer affirms that it understands and agrees to comply with the procedures of the New York State Department of Environmental Conservation relative to permissible contacts as required by State Finance Law §139-j (3) and §139-j (6) (b).

Use of Best Available Retrofit Technology (BART) and Ultra Low Sulphur Diesel (ULSD) Pursuant to Environmental Conservation Law Section 19-0323

Article 1(f) - <u>Use of Best Available Retrofit Technology (BART) and Ultra Low Sulphur Diesel (ULSD)</u> Provision

The Contractor certifies and warrants that all heavy duty vehicles, as defined in New York State Environmental Law (ECL) section 19-0323, to be used under this Contract, will comply with the specifications and provisions of ECL section 19-0323 and any regulations promulgated pursuant thereto, which requires the use of Best Available Retrofit Technology (BART) and Ultra Low Sulphur Diesel (ULSD), unless specifically waived by the Department. Qualification for a waiver under this law will be the responsibility of the Contractor.

NOTE: All references to "bid" "bidder" shall be deemed to include "proposer" "proposal."

Date
Print Name and Title
Signature

ARTICLE I(g) - Page to Attach

Bid Security

If Bid Security is a Bid Bond, use Bid Bond form and provide certified power of attorney.

NYSDEC-DER Site Number: 712009

ARTICLE 1(h) - Bid Bond

Surety
Principal Principal
hereunto set their hands and seals, and such of them as are ixed and these presents to be signed by their proper officers,
at the obligation of said Surety and its bond shall be in no way ich the Owner may accept such Bids; and said Surety does
emain in force and effect; it being expressly understood and ereunder shall, in no event, exceed the penal amount of this
ecute and deliver a contract in the Form of Contract attached Bid) and shall furnish a bond for the faithful performance of orming labor or furnishing materials in connection therewith, created by the acceptance of said Bid.
e Principal has submitted to New York State Department of ereby made a part hereof to enter into a contract in writing, for
for the payment of which, will and truly to be made, ecutors, administrators, successors and assigns. Signed this
and firmly bound unto New York State Department of

CONTRACT NUMBER: <u>D007992</u>

(ACKNOWLEDGMENT BY SURETY COMPANY)

County of) s.s.:	
depose and say that he/she resides in, t corporation described in and which executed the within seal affixed to said instrument is such corporate seal; t	onally came to me known, who being by me duly sworn, did that he/she is the (title) of the (firm), the instrument; that he/she knows the seal of said corporation; that the that it was so affixed by the order of the Board of Directors of said like order; and that the liabilities of said company do not exceed its ws of the State of New York.
(Seal)	
	Notary Public
(ACKNO	OWLEDGMENT)
State of) s.s.: County of)	
, personally known to me or proved whose names(s) is (are) subscribed to the within instru	, before me, the undersigned notary public, personally appeared d to me on the basis of satisfactory evidence to be the individual(s) ment and acknowledged to me that he/she/they executed the same signature(s) on the instrument, the individual(s), or the person I the instrument.
	Notary Public

ARTICLE 1(i) - Offerer Disclosure of Prior Non-Responsibility Determinations (Page 1 of 2)

Name of Individual or Entity Seeking to Enter into the Procurement Contract:
Address:
Name and Title of Person Submitting this Form:
Contract Procurement Number: D007992
Date:
 Has any Governmental Entity made a finding of non-responsibility regarding the individual or entity seeking to enter into the Procurement Contract in the previous four years? (Please circle): Yes No If yes, please answer the questions 2 - 4, if no, go to question 5:
2. Was the basis for the finding of non-responsibility due to a violation of State Finance Law §139-j? (Please circle): Yes No
3. Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity? (Please circle): Yes No
4. If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility below.
Governmental Entity:
Date of Finding of Non-responsibility:
Basis of Finding of Non-Responsibility:

(Add additional pages as necessary)

ARTICLE 1(i) - Offerer Disclosure of Prior Non-Responsibility Determinations (Continued) (Page 2 of 2)

Contract with the ab	nental Entity or other governmental agency terminated or withheld a Procurement sove-named individual or entity due to the intentional provision of false or tion? (Please circle):
Yes 🗌	No 🗌
6. If yes, please pro	vide details below.
Governmental Entity	y:
Date of Termination	or Withholding of Contract:
Basis of Termination	n or Withholding:
(Add addition	onal pages as necessary)
Offerer Certification	on:
	all information provided to the New York State Department of Environmental espect to State Finance Law §139-k is complete, true and accurate.
Ву:	Date:
Sign	ature

ARTICLE 2(a) - Corporate Resolution and Certification

"This Article 2(a) is not applicable"

ARTICLE 2(b) - Statement of Surety's Intent

To: New York State Department of Environmental Conservation

We have reviewed the Bid of	(Contractor)
of	(Address)
for	(Project)
Contract Number: <u>D007992</u>	
NYS Site Number: 712009	
Bids for which will be received on (insert Contractor be accepted and the Contract awarded to Con Performance Bond and Labor and Material Payment Bond re	tractor, it is our present intention to become surety on the
Any arrangement for the Bonds required by the Contract is a liability to Department or third parties if for any reason we de	
We are duly licensed to do business in the State of New York	Χ .
Attest:	
Corporate Seal	
(If no seal, write "No Seal" and sign)	Surety's Authorized Signature(s)
Telephone Number for Bonding Company	
Telephone Number for Bonding Broker	
Attach Power of Attorney	

Article 2(c) - M/WBE-EEO Workplan and Utilization Plan

Contractor must submit a M/WBE Workplan after being announced the apparent low bidder in accordance with Section III, Article 5.b. Contractor must submit M/WBE-EEO Utilization Plan after being issued Notice of Intent to Award in accordance with Section III, Article 5.c. Quarterly reporting is required throughout the term of the contract.

Contractors are invited to file the required forms online or may choose to complete and submit paper forms. Instructions are available at: http://www.dec.ny.gov/about/48854.html

If submitting paper forms, The M/WBE-EEO Utilization Plan and/or quarterly reports shall be sent directly to:

NYS Department of Environmental Conservation Division of Management and Budget Services Minority and Women's Business Programs Unit, 10th Floor 625 Broadway Albany, New York 12233-5028

Contractors opting to file electronic forms can obtain the appropriate forms from the website and certify to the Department, via a letter, within the timeframes designated in the Instructions to Bidders, that the forms have been completed and submitted. The Contractor will be able to supply any additional information requested by the Department, by updating the online forms and notifying the Department via letter, that it has been re-submitted.

M/WBE Directory on the Internet

Empire State Development has put the Minority and Women-Owned Business Directory on the Internet. The Internet address is www.empire.state.ny.us, just follow the links to the M/WBE Directory. Support will be available from 9:00 a.m. to 5:00 p.m., Monday through Friday, except for NYS holidays. If assistance is needed, call (518) 474-1979.

Article 2 (d) - Instructions for Completing the New York State Vendor Responsibility Questionnaire CCA-2

*Please Read Before Completing Questionnaire

Contractors must submit a Vendor Responsibility Questionnaire CCA-2 form after being announced the low bidder for any competitively bid contract of \$10,000 or more, or when proposed for subcontract work valued at \$10,000 or more. The Department may require additional information deemed necessary for its review.

Contractors are invited to file the required Vendor Responsibility Questionnaire online via the New York State VendRep System or may choose to complete and submit a paper questionnaire. To enroll in and use the New York State VendRep System, see the VendRep System Instructions available at http://www.osc.state.ny.us/vendrep/systeminit.htm or go directly to the VendRep System online at https://portal.osc.state.ny.us. For direct VendRep System user assistance, the Office of the State Comptroller's Help Desk may be reached at 866-370-4672 or 518-408-4672 or by email at helpdesk@osc.state.ny.us. Contractors opting to file a paper questionnaire can obtain the appropriate questionnaire from the VendRep website www.osc.state.ny.us/vendrep or contact the Office of the State Comptroller's Help Desk.

The enrollment process in the VendRep System can take several days. Contractors are encouraged to enroll prior to submitting bids to ensure meeting the timeframes for certification.

Contractors electing to file the Vendor Responsibility Questionnaire online shall certify to the Department, via a letter, within the timeframe designated in the Instructions to Bidders, that the questionnaire has been updated. The Contractor will be able to supply any additional information requested by the Department, by updating the online questionnaire and notifying the Department via letter, that it has been recertified.

Throughout the contract term, the Contractor is required to notify the Department in writing of any changes in Contractor's vendor responsibility disclosure related to the Contractor commencing bankruptcy proceedings; filings against the Contractor for relief under bankruptcy; Contractor making general assessment for benefit of creditors; a Court appointing a party to take charge of the Contractor's property; Contractor's inability to pay debts; or the Contractor being found in violation of laws and regulations of any public body having jurisdiction.

If the Contractor elects to file a paper copy directly with the Department, a completed original CCA-2 Form must be submitted within the timeframe designated in the Instructions to Bidders. Submit completed questionnaires marked "CONFIDENTIAL" to:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
David J. Chiusano, Project Manager
625 BROADWAY12th FLOOR
ALBANY, NY 12233-7017
(518)402-9814

ARTICLE 3(a) - Instructions for Certificate of Insurance

Use this form to certify insurance coverage and provide policy information.

Contractor must fill out Section 1 in its entirety before sending to the insurance agent.

Contractor is encouraged to send a copy of Section VIII, "General Conditions," Article 4, along with the Certificate of Insurance Form to its insurance agent in order that all required coverages and provisions are accounted for.

Insurance Agency

- 1) Complete Section 2 of the form.
- 2) Enter N/A if No Excess Umbrella (9) policy is in effect.
- 3) All insurance certificates must have a policy number entered otherwise it will result in rejection of the certificate.
- 4) Certificates must be signed by an authorized representative of the firm.
- 5) Specify policy if Other (10) is in effect, otherwise enter N/A.

Contractor

- 1) Complete Section 1 of the form.
- 2) At the top of the form, check "New" if you are submitting proof of coverage for a new contract. Check "Renewal" if you are submitting proof of renewals.
- 3) Submit original certificate and subsequent renewals to Division of Environmental Remediation, New York State Department of Environmental Conservation, 12th Floor, New York State Department of Environmental Conservation, 625 Broadway, Albany, New York 12233-7017, Attention: "David J. Chiusano, Project Manager." (Also see Section IV, Article 2 for name of project manager).

Certificate of Insurance

New York State Department of Division of Environmental Re- Remedial Bureau E, Section A 625 Broadway, 12 th Floor, Alba	mediation L			NYSDEC-DER Contract No.] Certificate of	D007992
		SECTIO	N 1		
Greg & Carol Schmid			,6,7 & 10) rk & NYS Department of Environn chmidt neering and Consulting	nental Conservation	
Location and Description of Wor a clean soil cover at the South Hill			e under NY		the installation of
This is to certify that policies of in	isurance liste			tractor named above and are in	force at this time
Insurance	Policy #	Name of Company Affording Coverage	Expir. Date	Limits of Liability (in Each Occurrence	
1. Contractor's Liability					
2. Contractor's Protective Liability					
3. Complete Operations/Products					
4. Contractual Liability					
5. Owner's Protective Liability					
6. Automobile Liability					
7. Pollution Liability					
8. Worker's Comp. Disability Benefits				Limits as required by Law Limits as required by Law	
9. Excess Umbrella					
10. Other					
Such insurance as is herein certified: I forming this contract, 2) applies whe Environmental Conservation have bee company's applicable manuals or rule No policy referred to herein shall be opremiums until thirty (30) days written Dept. of Environmental Conservation	ther or not the en executed, and s and rates in e changed, cance n notice has been	contract documents betweed 3) is written in accordance offect as modified by this celled or coverage terminated en received by the Division y, Albany, NY 12233-7017	en the insure with the co- rtificate and for any rea- of Environn . Such notice	ed contractor and the State of New mpany's regular policies and endorse the insurance article of the contract son including expiration of the polic mental Remediation, Remedial Burea	York Department of ments, subject to the
Date Issued		By	(Cia-	ature of Authorized Repres	ontotivo)
Date Issued			(Sign	ature of Authorized Repres	entative)
Print Insurance Agen Policy coverages must agree wi		s stated on the Certific	rate Fals	e statements of coverage are i	ounishable under
Section 117 of the New York Sta			aic. Fals	c searchers of corerage are	Jamonavic unucl

V-18

ARTICLE 3(c) - Instruction for Performance Bond and Labor and Material Payment Bond

- 1) The performance bond and the labor and material payment bond are to be only submitted by the bidder who receives the Notice of Intent to Award letter from **Department**.
- 2) Use the forms that are included in the Contract Documents. **DO NOT RETYPE THE FORMS.**
- 3) Attach a <u>SEPARATE</u> certified power of attorney and surety financial statement to <u>EACH</u> bond (i.e., one set attached to performance bond and one set attached to labor and material payment bond).

ARTICLE 3(d) - Performance Bond

Date Bond Executed		NYSDEC-DER Site Number: 712009
Date Contract Executed By Pr	incipal	
Principal (Name and Address)		
	<u>.</u>	n and location of principal office)
Full and Just Sum of Bond	,	
	(Everage in fig	mirae)

Know all men by these presents, That we, the **Principal** and **Surety**, above named, are held and firmly bound unto the Department of Environmental Conservation for and on behalf of the People of the State of New York, hereinafter called the Department, in full and just sum of the amount stated above, good and lawful money of the United States of America, to the payment of which said sum, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the Principal has entered into a certain written contract with the Department, covering the project and specification above;

Now, Therefore, the condition of this obligation is such, that if the **Principal** shall well, truly and faithfully comply with and perform all of the terms, covenants and conditions of said contract on their (his, its) part to be kept and performed, according to the true intent and meaning of said contract, and shall protect the Department and the People of the State of New York against, and pay any and all amounts, damages, costs and judgments which may or shall be recovered against the Department or the State of New York may be called upon to pay to any person or corporation by reason of any damages arising or growing out of the doing of said work, or the repair or maintenance thereof, or the manner of doing the same, or the neglect of the **Principal**, or their (its) agents or servants, or the improper performance of the work by the **Principal**, or their (its) agents or servants, or the infringement of any patent or patent rights by reason of the use of materials furnished or work done as aforesaid or otherwise, then this obligation shall be null and void, otherwise to remain in full force and virtue.

And the **Surety**, for value received, hereby stipulates and agrees, if requested to do so by the department to fully perform and complete the work mentioned and described in the contract and specifications, pursuant to the terms, conditions and covenants thereof, if for any cause, the **Principal** fails or neglects to so fully perform and complete the work; and the **Surety** further agrees to commence the work of completion within twenty days after notice thereof from the Department, and to complete the work with all due diligence.

And the **Surety**, for value received hereby stipulates and agrees that no change, extension, alteration or addition to the terms of this contract or specifications, accompanying the same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension, alteration or addition.

Signed, sealed and delivered in the presence of Name of Corporation **Corporate Seal of Principal** By _____ if a Corporation Print Name L.S. Signature Date ____ **Corporate Seal of Surety Company Corporation Surety Business Address** By (President) Attest (Secretary) Date _____ (ACKNOWLEDGMENT BY SURETY COMPANY) State of) County of s.s.: On this _____ day of _____, 20____ before me personally came ______ to me known, who being by me duly sworn, did depose and say that he/she resides in_____, that he/she is the _____ (title) of the _____ (firm), the corporation described in and which executed the within instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation and the he/she signed his name thereto by like order; and that the liabilities of said company do not exceed its assets as ascertained in the manner provided by the laws of the State of New York. (Seal) **Notary Public** (ACKNOWLEDGMENT) State of County of) s.s.: On the ____day of _____ in the year _____, before me, the undersigned notary public, personally appeared personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose names(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument. **Notary Public**

In Testimony Whereof, the Principal and the President and Secretary of the Surety have caused this instrument to be

signed and sealed on the date shown above.

ARTICLE 3(e) - New York State Department of Environmental Conservation

Labor and Material Payment Bond

Date Bond Executed:		NYSDEC-DER Site Number: 712009
Date Contract Executed By Princip	oal	
Principal (Name and Address)		
		poration and location of principal office)
		ds)
	(Expre	ss in figures)
firmly bound unto the Department of in full and just sum of the amount stat which said sum, well and truly to be n jointly and severally, firmly by these	Environmental ed above, good nade, we bind or presents.	That We , the Principal and the Surety above named, are held and Conservation for and on behalf of the People of the State of New York, and lawful money of the United States of America, to the payment of burselves, our heirs, executors, administrators, successors and assigns, to a certain written contract with the Department of Environmental andicated above.
due to all persons furnishing labor and	l materials to hi	obligation is such, that if the Principal shall promptly pay all moneys im or his subcontractors in the prosecution of the work provided for in wise to remain in full force and effect;
bond in order to comply with the pro-	visions of Secti shall be detern	The State of New York having required the Principal to furnish this on 137 of the State Finance Law, all rights and remedies on this bond nined in accordance with the provisions, conditions and limitations of a dat length herein; and
		ny action on this bond shall be in the county in which the contract was d in more than one county, then in any such county, and not elsewhere.
In Testimony Where instrument to be signed and sealed or		pal and the President and Secretary of the Surety have caused this n above.
Signed, sealed and delivered in the pr	resence of	Name of Corporation
Corporate Seal of Principal	Th.	Name of Corporation
if a Corporation	$\mathbf{B}\mathbf{y}$	Print Name
		L.S.
		Signature
		Date

Corporate Seal of Surety Company	
	Corporation Surety
	Business Address
	By (President)
	Attest (Secretary)
	Date
(ACKNOWLEDO	GMENT BY SURETY COMPANY)
State of) County of) s.s.:	
did depose and say that he/she resides inthe corporation described in and which executed the seal affixed to said instrument is such corporate	to me known, who being by me duly sworn, that he/she is the
Scai	Notary Public
(ACK	KNOWLEDGMENT)
State of) s.s.: County of)	
, personally known to me or prowhose names(s) is (are) subscribed to the within in	, before me, the undersigned notary public, personally appeared oved to me on the basis of satisfactory evidence to be the individual(s) strument and acknowledged to me that he/she/they executed the same eir signature(s) on the instrument, the individual(s), or the person atted the instrument.
	Notary Public

SECTION VI

Agreement

(hereinafter referred to as Department) having offices at 625	-
a corporation organized and existing under the laws	of the State of
a partnership, consisting of	
an individual conducting business as	
the location of whose principal office is	hereinafter called "Contractor."

WITNESSETH

Whereas, Department is empowered by law to obtain services; the performance of these services is essential to Department; and Department, after fully examining all of its internal capabilities and thoroughly investigating all possible alternative approaches, has determined that certain tasks can best be accomplished through a contract;

Whereas, Contractor hereby represents that it is capable of providing the services which are the subject matter of this Contract;

Now Therefore, Department **and** Contractor, in consideration of the mutual covenants hereinafter set forth agree as follows:

ARTICLE 1 - Defined Terms

Terms used in the Agreement which are defined in the Contract Documents have the intent and meanings assigned to them in the Contract Documents.

ARTICLE 2 - Work

As indicated or specified in the Contract Documents, Contractor shall complete in a timely and workmanlike manner, any and all obligations, duties and responsibilities, and provide any and all labor, materials, equipment, temporary facilities, and incidentals necessary to complete the construction generally identified and shown on the plans and Contract Documents entitled:

New York State Department of Environmental Conservation

Site Name: South Hill Dump Site Contract Number: D007992

Date: March 2011

ARTICLE 3 - Engineer

MACTEC Engineering and Consulting, Inc., shall assume all duties and responsibilities of and have the rights and authority assigned to Engineer in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 4 - Contract Documents

The Documents which comprise the entire Contract between Department and Contractor concerning the Work consist of the following:

- 4.0 Appendices A and B
- 4.1 Engineer's written clarifications and interpretations
- 4.2 Change Orders
- 4.3 Administrative Agreements
- 4.4 Field Orders
- 4.5 Proposed Change Orders signed by Department
- 4.6 Approved Shop Drawings
- 4.7 Addenda
- 4.8 Agreement
- 4.9 Measurement for Payment
- 4.10 Bid Forms and Attachments Exclusive of Bonds and Insurance Certificates
- 4.11 Drawings, Plans
- 4.12 Supplementary Specifications
- 4.13 Supplementary Conditions
- 4.14 Standard Specifications
- 4.15 General Conditions
- 4.16 Supplementary Bidding Information and Requirements
- 4.17 Bidding Information and Requirements
- 4.18 Terms and Definitions
- 4.19 Advertisement
- 4.20 Bonds and Insurance Certificates

In the event of a conflict between the documents set forth above, they shall be entitled to priority according to the order in which they are listed.

ARTICLE 5 - Contractor's Representations

In order to induce Department to enter into this Agreement, Contractor makes the following representations:

- 5.1 Contractor has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and applicable Laws that in any manner may affect cost, schedule, progress, performance or furnishing of the Work.
- 5.2 Contractor has studied carefully all reports of explorations and tests of subsurface conditions and drawings of physical conditions which are identified in Information to Bidders, as provided in the General Conditions, and accepts the determination set forth in said Section to the extent of the technical data contained in such reports and drawings upon which Contractor is entitled to reply.
- 5.3 Contractor has obtained and carefully studied all such examinations, investigations, explorations, tests, reports and studies which pertain to the subsurface or physical conditions at or contiguous to the site or otherwise may affect the cost, schedule, progress, performance or furnishing of the Work as Contractor

considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Article 3 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by Contractor for such purposes.

- 5.4 Contractor has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities are or will be required by Contractor in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Article 3 of the General Conditions.
- 5.5 Contractor has correlated (or assumes responsibility for correlating) the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
- 5.6 Contractor has given Engineer written notice of all conflicts, errors or discrepancies that he (she) has discovered in the Contract Documents and any written resolution thereof is acceptable to Contractor.

ARTICLE 6 - Contract Term

The number of days within which, or alternatively, the dates by which, the Work, or any specified part thereof, is to be completed (the Contract Times) are set forth as follows:

- 6.1 The Work will be Substantially Completed within <u>one hundred eighty(180) calendar days</u> from the Effective Date of the Agreement plus twenty (20) calendar days.
- 6.2 Separable parts of the Work, if specified in an Attachment A to this Agreement, will be Substantially Completed within the number of days stated in Attachment A from the Effective Date of the Agreement plus twenty (20) calendar days.
- 6.3 The Work will be completed and ready for final payment in accordance with the General Conditions within **two hundred forty(240) calendar days** from the Effective Date of the Agreement plus twenty (20) calendar days or within 60 days of substantial completion, whichever is sooner.
- 6.4 Department and Contractor recognize that the Contract Time(s) specified in paragraphs 6.1, 6.2, and 6.3 above are of the essence of this Agreement, and that Department may suffer financial loss if the Work is not completed within the Contract Time(s) specified above, plus any extensions thereof allowed in accordance with the General Conditions, as amended or supplemented in the Supplementary Conditions.
- Accordingly, Contractor agrees to forfeit and pay Department as liquidated damages, and not as a penalty, the amount of <u>one thousand one hundred forty dollars (\$1,140)</u> for each day that expires after the Contract Time specified in paragraph 6.1 above for Substantial Completion until the Work is Substantially Complete. Contractor further agrees to pay Department as liquidated damages, and not as a penalty, each of the amounts set forth in Attachment A if applicable to this agreement for each day that expires after each of the contract times specified in paragraph 6.2 above for substantial completion until the each of the separable parts of the work is substantially complete. After substantial completion of the work, if Contractor shall neglect, refuse or fail to complete the remaining work within the contract time or any proper extension thereof granted by Department, Contractor shall pay Department as liquidated damages, and not as a penalty, the amount of <u>five hundred seventy dollars (\$570)</u> for each day that expires after the Contract Time specified in paragraph 6.3 above for completion and readiness for payment. These liquidated damages are additive and represent a reasonable estimate, in lieu of any such

- proof, of Department's extra expenses for Inspection, engineering services, administrative costs, and Interim excess operating costs for each day that expires after the associated Contract Time.
- 6.6 In addition to the liquidated damage amounts set forth in paragraph 6.5 above, Contractor agrees to pay Department's additional actual damages arising out of the types of expenses itemized below for each day that expires after each of the Contract Times specified in paragraph 6.1 above for Completion of each of the designated parts of the Work until each of the designated parts of the Work achieves the specified completion. These actual damages are additive and shall equal Department's expenditures for costs other than those itemized in paragraph 6.5, including, but not limited to, delay damage settlements or awards related to other separate contracts, delay penalties or fines imposed by regulatory agencies, contract damage and loss of use, excess financing costs, and professional fees and related expenses incurred thereto.

ARTICLE 7 - Alterations and Omissions

Department reserves the right, at any time during the progress of the work, to alter the plans or omit any portion of the work as it may deem reasonably necessary for the public interest; making allowances for additions and deductions with compensation made in accordance with the Contract Documents.

ARTICLE 8 - Determinations as to Variances

In case of any ambiguity in the Contract Documents, the matter must be immediately submitted to the Representative of Department designated in the Contract Documents, who shall adjust the same, and his (her) decision in relation thereto shall be final and conclusive upon the parties.

ARTICLE 9 - Payment Procedures

Contractor shall submit Applications for Payment on standard form in accordance with the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions, as amended or supplemented in the Supplementary Conditions and in accordance with Section 139-f of the State Finance Law.

9.1 **Progress Payments.** Contractor shall submit Applications for Payments to Engineer for review no more frequently than monthly in accordance with paragraph 13.2 of the General Conditions from the date when the Contract Time commences to run. Department shall make progress payments against the Contract Price on the basis of Contractor's Applications for Payment as recommended by Engineer as provided below. All progress payments will be calculated on the basis of the progress of the Work measured by the schedule of values established pursuant to paragraph 1.4.3 of the General Conditions. Progress payments will also be made for materials pertinent to the Contract in accordance with the General Conditions. Contractor shall provide complete and accurate billing invoices to the Department in order to receive payment. Billing invoices submitted to the Department must contain all information and supporting documentation required by the Contract, the Department, and the State Comptroller. Payment for invoices submitted by the Contractor shall only be rendered electronically unless payment by paper check is expressly authorized by the Commissioner, in the Commissioner's sole discretion, due to extenuating circumstances. Such electronic payment shall be made in accordance with ordinary State procedures and practices. The Contractor shall comply with the State Comptroller's procedures to authorize electronic payments. Authorization forms are available at the State Comptroller's website www.osc.state.ny.us/epay/index.htm, by email at epunit@osc.state.ny.us, or by telephone at 518-486-1255. Contractor acknowledges that it will not receive payment on any invoices submitted under this Contract if it does not comply with the State Comptroller's payment procedures, except where the Commissioner has expressly authorized payment by paper check as set forth above.

- 9.1.1 Prior to Substantial Completion of the Work, progress payments will be made less five percent (5%) the aggregate of payments (i.e. retainage) previously made and less an amount necessary to satisfy any claims, liens, or judgments against Contractor which have not been suitably discharged.
- 9.2 **Payment upon substantial completion.** When the work or major portions thereof, as contemplated in the Contract Documents, is substantially completed, Contractor shall submit to Department, an Application for Payment in accordance with the General Conditions for the remaining amount of the contract balance or amount due for that major portion completed. Department will pay the remaining Contract balance, or amount due for that major portion completed, less two times the value of any remaining items to be completed and an amount necessary to satisfy any claims, liens, judgments against Contractor which have not been suitably discharged. Payment for remaining items will be made upon their completion.
- 9.3 **Final Payment.** Upon final completion of the physical Work and acceptance of the Work in accordance with the General Conditions, Department shall pay the remainder of the Contract Price as recommended by Engineer.

ARTICLE 10 - No Estimate on Contractor's Noncompliance

It is further agreed that so long as Contractor has not complied with any lawful or proper direction concerning the work or material given by Department, Contractor shall not be entitled to have any estimate made for the purpose of payment, nor shall any estimate be rendered on account of work done or material furnished until Contractor has fully and satisfactorily complied with such direction.

ARTICLE 11 - Delays, Inefficiencies, and Interference

Contractor agrees to make no claim for any consequential damages attributable to any delays, or act in the performance of this contract which are not directly occasioned by any act or omission to act by the State or any of its representatives. In the event Contractor completes the work prior to the contract completion date set forth in the proposal, Contractor hereby agrees to make no claim for extra costs due to delays, interferences or inefficiencies in the performance of the work.

- 1) Contractor further agrees that it has included in its bid prices for the various items of the contract any additional costs for delays, inefficiencies, or interferences affecting the performance or scheduling of contract work caused by, or attributable to, the following instances:
 - a) The work or the presence on the Site of any third party, including but not limited to that of other contractors or personnel employed by the State, or by other public bodies, by railroad, transportation or utility companies or corporations, or by private enterprises, or any delay in progressing such work by any third party.
 - b) The existence of any facility or appurtenance owned, operated, or maintained by any third party.
 - c) The act, or failure to act, of any other public or governmental body, including, but not limited to, approvals, permits, restrictions, regulations or ordinances.
 - d) Restraining orders, injunctions, or judgments issued by a court.
 - e) Any labor boycott, strike, picketing or similar situation.
 - f) Any shortages of supplies or materials required by the contract work.

g) Any situation which was, or should have been within, the contemplation of the parties at the time of entering into the contract.

ARTICLE 12 - Postponement, Suspension or Termination

- 12.1 Department shall have the right to postpone, suspend or terminate this Contract in whole or in part for the convenience of Department. If, after termination for cause of Contractor it is determined that no cause existed for termination of Contractor, such termination shall be deemed to have been made for the convenience of Department.
- 12.2 If this Contract is terminated by Department for convenience or cause, Department shall make payment on an equitable basis for all work performed in accordance with the Contract Documents prior to termination in accordance with paragraphs 12.3 and 12.4 below.
- 12.3 If this contract is terminated for cause, no payment shall be made for anticipated profit on unperformed work or services. Additionally, Department may adjust any payment due to Contractor at the time of termination to account for any additional costs to Department because of Contractor's default.
- 12.4 If this contract is terminated for convenience, payment shall be made for any services rendered and expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by Contractor which had become firm prior to the termination.
- 12.5 Upon termination of this Contract under this Agreement, Department may take over the work or may award or negotiate a contract with another party to complete work required by these Contract Documents.

ARTICLE 13 - Completion of Physical Work and Final Acceptance

The time within which Department may bring an action on the Contract against Contractor shall be computed from the date of completion of the physical Work. In accordance with Section 138-a of the State Finance Law, Contractor shall notify Department in writing that the physical Work has been completed. The date of completion must be no more than thirty days prior to the date of the notice. This notice must be delivered personally or by either registered or certified mail, return receipt requested to the exact address given below.

If Department disagrees with the date set forth in the notice, it will so advise Contractor in writing within 30 days of receipt of the notice. This notice will be delivered by either registered or certified mail, return receipt requested to Contractor's address as shown in this Agreement.

If Department accepts Contractor's date of completion of physical Work, Department's final acceptance of work shall be as of that date.

When, in the opinion of Department, Contractor has fully performed the physical Work under the Contract, Department shall notify Contractor in writing of final acceptance.

ARTICLE 14 - Final Payment

After the final acceptance of the work, Engineer shall prepare a final agreement of the work performed and the materials placed and shall compute the value of such work and materials under and according to the terms of the

contract. This agreement shall be certified, as to its correctness, by Engineer and submitted for final approval to Department. The Representative of Department designated in the Contract Documents shall have the right to reject the whole or any portion of the final agreement, should the said certificate of Engineer be found or known to be inconsistent with the terms of the agreement or otherwise improperly given and upon failure of Contractor to provide requested documentation including but not limited to that regarding payment of wages, suppliers or subcontractors. All certificates upon which partial payments may have been made being merely estimates, shall be subject to correction in the final certificate or final agreement.

ARTICLE 15 - Disposition of Documents and Data

Upon final acceptance of work under this Contract or termination of this Contract pursuant to this Agreement, or upon written demand of Department, Contractor shall promptly deliver or otherwise make available to Department all data, drawings, reports, estimates, and such other information and materials as may have been accumulated by Contractor in performing this Contract.

All final documents are to be submitted in an electronic format that complies with the most recent DER's Electronic Document Standards. Final documents are to be submitted as an Adobe PDF document. Final data sets shall be provided in the electronic data deliverable (EDD) that complies with the most recent DER's Electronic Data Warehouse Standards. Until such time as the Department establishes an EDD, the Division of Environmental Remediation is using the USEPA Region 2 MEDD: http://www.epa.gov.region02/superfund/medd.htm

ARTICLE 16 - Applicable Law; Jurisdiction; Service of Legal Process

Contractor agrees:

- 16.1 That this Agreement is subject to and governed by all applicable federal and New York State law.
- 16.2 To procure all necessary licenses and permits.
- 16.3 To voluntarily and irrevocably submit to the jurisdiction of a New York State Court of competent jurisdiction, to resolve any dispute or controversy arising out of this Contract.
- That the venue of any action at law or in equity commenced against Department arising out of a Project in one of Department's regions, shall be in the county in that Region where Department regional headquarters is located.
- That the service of legal process or any notices in connection with a dispute or controversy arising out of this Contract, by United States registered mail, postage prepaid, addressed to the Designated representative of Department at the address stated in the Contract. Documents shall constitute good and valid service of process upon Engineer.
- 16.6 To waive any defense based on or alleging lack of jurisdiction, improper venue, or invalid service, if there is compliance with paragraphs 16.3 and 16.4 in this Article.
- 16.7 This Contract may be presented in court as conclusive evidence of the foregoing agreement.

ARTICLE 17 - Sales and Use Tax Exemption

Contractor represents that this project has been bid in such a manner that Department has full advantage of available exemptions from sales and compensating use taxes. Accordingly, Contractor agrees to make all payment requests in a manner which affords Department full advantage of such exemptions. Further, Contractor agrees to complete and to require all subcontractors and material men to complete a Contractor Exempt Purchase Certificate in the name of the New York State Department of Environmental Conservation, which shall be furnished to all persons, firms or corporations from whom they purchase materials, equipment or supplies which are tax exempt by reason of the fact that they will be sold to Department, or will be used as an integral component in the construction, rehabilitation, or improvement of any structure of building required by the Contract Documents.

Contractor agrees to maintain and keep, and to contractually require all subcontractors and material men to maintain and keep, records relating to the tax exemption of material, equipment and Supplies for a period of six years. The six year period shall commence to run as of the date of final payment.

ARTICLE 18 - Effective Date

This Agreement and all Contract Documents shall take effect as of the date it is approved and filed by the Comptroller.

ARTICLE 19 - Contract Price

The maximum payment which Department shall pay to Contractor, and which Contractor agrees to accept a	as full
payment for its work under this Contract, is the total of:	

Bid \$	
--------	--

Plus change order(s)

CONTRACT NUMBER: D007992

IN WITNESS WHEREOF, representatives of the Department and the Contractor have executed this Contract on the day and year written beneath their respective signatures. The signatory for the Department provides the following Agency Certification: "In addition to the acceptance of this contract, I also certify that original copies of this signature page will be attached to all other exact copies of this contract."

FOR DEPARTMENT	
By:	
Title:	
Date:	
FOR CONTRACTOR	
By:	
Title:	
Date:	
Approved as to Form:	Approved:
	Thomas P. DiNapoli State Comptroller
By: For Attorney General	By:
Date:	Date:

This contract is not effective until it is approved by the State Comptroller and filed in his office (Section 112, State Finance Law).

CONTRACT NUMBER:D007992

(ACKNOWLEDGMENT)

State of)		
County of)	s.s.:	
names(s) is in his/her/th	, per (are) subscr eir capacity	rsonally known to me or ibed to the within instru	, before me, the undersigned notary public, personally appeared or proved to me on the basis of satisfactory evidence to be the individual(s) whose nument and acknowledged to me that he/she/they executed the same er/their signature(s) on the instrument, the individual(s), or the person upon behalf instrument.
			Notary Public

SECTION VII

Appendix A and Appendix B

STANDARD CLAUSES FOR NYS CONTRACTS APPENDIX A

STANDARD CLAUSES FOR NYS CONTRACTS

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State, whether a contractor, licenser, licensee, lessor, lessee or any other party):

- 1. <u>EXECUTORY CLAUSE</u>. In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.
- NON-ASSIGNMENT CLAUSE. In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the State's previous written consent, and attempts to do so are null and void. Notwithstanding the foregoing, such prior written consent of an assignment of a contract let pursuant to Article XI of the State Finance Law may be waived at the discretion of the contracting agency and with the concurrence of the State Comptroller where the original contract was subject to the State Comptroller's approval, where the assignment is due to a reorganization, merger or consolidation of the Contractor's business entity or enterprise. The State retains its right to approve an assignment and to require that any Contractor demonstrate its responsibility to do business with the State. The Contractor may, however, assign its right to receive payments without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.
- COMPTROLLER'S APPROVAL. In accordance with Section 112 of the State Finance Law (or, if this contract is with the State University or City University of New York, Section 355 or Section 6218 of the Education Law), if this contract exceeds \$50,000 (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and C.U.N.Y. contracts), or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds \$10,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed \$85,000 (State Finance Law Section 163.6.a).
- **4.** WORKERS' COMPENSATION BENEFITS. In accordance with Section 142 of the State Finance Law, this contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.
- **5. NON-DISCRIMINATION REQUIREMENTS.** To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any

employee or applicant for employment because of race, creed, color, sex, national origin, sexual orientation, age, disability, genetic predisposition or carrier status, or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex, or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

- WAGE AND HOURS PROVISIONS. If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law. Additionally, effective April 28, 2008, if this is a public work contract covered by Article 8 of the Labor Law, the Contractor understands and agrees that the filing of payrolls in a manner consistent with Subdivision 3a of Section 220 of the Labor Law shall be a condition precedent to payment by the State of any State approved sums due and owing for work done upon the project.
- 7. NON-COLLUSIVE BIDDING CERTIFICATION. In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor affirms, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further affirms that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.
- **8. INTERNATIONAL BOYCOTT PROHIBITION.** In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds \$5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export

STANDARD CLAUSES FOR NYS CONTRACTS

APPENDIX A

Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2NYCRR 105.4).

- 9. <u>SET-OFF RIGHTS</u>. The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.
- 10. RECORDS. The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively, "the Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this contract, shall have access to the Records during normal business hours at an office of the Contractor within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.
- IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION. **FEDERAL EMPLOYER** (a) IDENTIFICATION NUMBER and/or FEDERAL SOCIAL SECURITY NUMBER. All invoices or New York State standard vouchers submitted for payment for the sale of goods or services or the lease of real or personal property to a New York State agency must include the payee's identification number, i.e., the seller's or lessor's identification number. The number is either the payee's Federal employer identification number or Federal social security number, or both such numbers when the payee has both such numbers. Failure to include this number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on

its invoice or New York State standard voucher, must give the reason or reasons why the payee does not have such number or numbers.

- PRIVACY NOTIFICATION. (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law. (2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in New York State's Central Accounting System by the Director of Accounting Operations, Office of the State Comptroller, 110 State Street, Albany, New York 12236.
- EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN. In accordance with Section 312 of the Executive Law, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000.00, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written agreement in excess of \$100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of \$100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then:
- (a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination. Affirmative action shall mean recruitment, employment, job assignment, promotion, upgradings, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation;
- (b) at the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the contractor's obligations herein; and

the Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital

STANDARD CLAUSES FOR NYS CONTRACTS

Contractor will include the provisions of "a", "b", and "c" above, in every subcontract over \$25,000.00 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State; or (iii) banking services, insurance policies or the sale of securities. The State shall consider compliance by a contractor or subcontractor with the requirements of any federal law concerning equal employment opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the Governor's Office of Minority and Women's Business Development pertaining hereto.

- CONFLICTING TERMS. In the event of a conflict 13. between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.
- **GOVERNING LAW.** This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.
- LATE PAYMENT. Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article 11-A of the State Finance Law to the extent required by law.
- NO ARBITRATION. 16. Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.
- SERVICE OF PROCESS. In addition to the methods 17. of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.
- PROHIBITION ON PURCHASE OF TROPICAL **HARDWOODS**. The Contractor certifies and warrants that all wood products to be used under this contract award will be in

accordance with, but not limited to, the specifications and provisions of Section 165 of the State Finance Law, (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in §165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.

MACBRIDE FAIR EMPLOYMENT PRINCIPLES.

In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in Section 165 of the New York State Finance Law), and shall permit independent monitoring of compliance with such principles.

OMNIBUS PROCUREMENT ACT OF 1992. It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

> NYS Department of Economic Development Division for Small Business 30 South Pearl St -- 7th Floor Albany, New York 12245 Telephone: 518-292-5220

Fax: 518-292-5884

http://www.empire.state.ny.us

A directory of certified minority and women-owned business enterprises is available from:

> NYS Department of Economic Development Division of Minority and Women's Business Development 30 South Pearl St -- 2nd Floor Albany, New York 12245 Telephone: 518-292-5250

Fax: 518-292-5803

http://www.empire.state.ny.us

The Omnibus Procurement Act of 1992 requires that by signing this bid proposal or contract, as applicable, Contractors certify that whenever the total bid amount is greater than \$1 million:

STANDARD CLAUSES FOR NYS CONTRACTS

APPENDIX A

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

- (b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;
- (c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the State upon request; and
- (d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

21. RECIPROCITY AND SANCTIONS PROVISIONS.

Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

- 22. <u>COMPLIANCE WITH NEW YORK STATE</u>
 <u>INFORMATION SECURITY BREACH AND</u>
 <u>NOTIFICATION ACT.</u> Contractor shall comply with the provisions of the New York State Information Security Breach and Notification Act (General Business Law Section 899-aa; State Technology Law Section 208).
- 23. **COMPLIANCE** WITH CONSULTANT DISCLOSURE LAW. If this is a contract for consulting services, defined for purposes of this requirement to include analysis, evaluation, research, training, data processing, computer programming, engineering, environmental, health, and mental health services, accounting, auditing, paralegal, legal or similar services, then, in accordance with Section 163 (4-g) of the State Finance Law (as amended by Chapter 10 of the Laws of 2006), the Contractor shall timely, accurately and properly comply with the requirement to submit an annual employment report for the contract to the agency that awarded the contract, the Department of Civil Service and the State Comptroller.
- **24. PROCUREMENT LOBBYING.** To the extent this agreement is a "procurement contract" as defined by State Finance Law Sections 139-j and 139-k, by signing this agreement the contractor certifies and affirms that all disclosures made in accordance with State Finance Law

Sections 139-j and 139-k are complete, true and accurate. In the event such certification is found to be intentionally false or intentionally incomplete, the State may terminate the agreement by providing written notification to the Contractor in accordance with the terms of the agreement.

25. CERTIFICATION OF REGISTRATION TO COLLECT SALES AND COMPENSATING USE TAX BY CERTAIN STATE CONTRACTORS, AFFILIATES AND SUBCONTRACTORS.

To the extent this agreement is a contract as defined by Tax Law Section 5-a, if the contractor fails to make the certification required by Tax Law Section 5-a or if during the term of the contract, the Department of Taxation and Finance or the covered agency, as defined by Tax Law 5-a, discovers that the certification, made under penalty of perjury, is false, then such failure to file or false certification shall be a material breach of this contract and this contract may be terminated, by providing written notification to the Contractor in accordance with the terms of the agreement, if the covered agency determines that such action is in the best interest of the State.

APPENDIX B

(For DER Superfund/BOA Contracts) Standard Clauses for All New York State Department of Environmental Conservation Contracts

The parties to the attached contract, license, lease, grant, amendment or other agreement of any kind (hereinafter "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract. The word "Contractor" herein refers to any party to the contract, other than the New York State Department of Environmental Conservation (hereinafter "Department").

- Postponement, suspension, abandonment or termination by the Department: The Department shall have the right to postpone, suspend, abandon or terminate this contract, and such actions shall in no event be deemed a breach of contract. In the event of any termination, postponement, delay, suspension or abandonment, the Contractor shall immediately stop work, take steps to incur no additional obligations, and to limit further expenditures. Within 15 days of receipt of notice, the Contractor shall deliver to the Department all data, reports, plans, or other documentation related to the performance of this contract, including but not limited to source codes and specifications, guarantees, warranties, as-built plans and shop drawings. In any of these events, the Department shall make settlement with the Contractor upon an equitable basis as determined by the Department which shall fix the value of the work which was performed by the Contractor prior to the postponement, suspension, abandonment or termination of this contract. This clause shall not apply to this contract if the contract contains other provisions applicable to postponement, suspension or termination of the contract.
- II. **Indemnification and Holdharmless** The Contractor agrees that it will indemnify and save harmless the Department and the State of New York from and against all losses from claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against it by reason of any acts or omissions of the Contractor, its agents, employees, or subcontractors in the performance of this contract which are shown to have been the result of negligence, gross negligence or reckless, wanton or intentional misconduct.
- III. Conflict of Interest (a) Organizational Conflict of Interest. To the best of the Contractor's knowledge and belief, the Contractor warrants that there are no relevant

facts or circumstances which could give rise to an organizational conflict of interest, as herein defined, or that the Contractor has disclosed all such relevant information to the Department.

- (1) An organizational conflict of interest exists when the nature of the work to be performed under this contract may, without some restriction on future activities, impair or appear to impair the Contractor's objectivity in performing the work for the Department.
- (2) The Contractor agrees that if an actual, or potential organizational conflict of interest is discovered at any time after award, whether before or during performance, the Contractor will immediately make a full disclosure in writing to the Department. This disclosure shall include a description of actions which the Contractor has taken or proposes to take, after consultation with the Department, to avoid, mitigate, or minimize the actual or potential conflict.
- (3) To the extent that the work under this contract requires access to personal, proprietary or confidential business or financial data of persons or other companies, and as long as such data remains proprietary or confidential, the Contractor shall protect such data from unauthorized use and disclosure and agrees not to use it to compete with such companies.
- (b) <u>Personal Conflict of Interest</u>: The following provisions with regard to management or professional level employee personnel performing under this contract shall apply until the earlier of the termination date of the affected employee(s) or the duration of the contract.
- (1) A personal conflict of interest is defined as a relationship of an employee, subcontractor employee, or consultant with an entity that may impair or appear to impair the objectivity of the employee, subcontractor employee, or consultant in performing the contract work. The Contractor agrees to notify the Department immediately of any actual, or potential personal conflict of interest with regard to any such person working on or having access to information regarding this contract, as soon as Contractor becomes aware of such conflict. The Department will notify the Contractor of the appropriate action to be taken.

- (2) The Contractor agrees to advise all management or professional level employees involved in the work of this contract, that they must report any personal conflicts of interest to the Contractor. The Contractor must then advise the Department which will advise the Contractor of the appropriate action to be taken.
- Unless waived by the Department, Contractor shall certify annually that, to the best of the Contractor's knowledge and belief, all actual, apparent or potential conflicts of interest, both personal and organizational, as defined herein, have been reported to the Department. Such certification must be signed by a senior executive of the Contractor and submitted in accordance with instructions provided by the Department. Along with the annual certification, the Contractor shall also submit an update of any changes in any conflict of interest plan submitted with its proposal for this contract. The initial certification shall cover the one-year period from the date of contract award, and all subsequent certifications shall cover successive annual periods thereafter. The certification is to be submitted no later than 45 days after the close of the previous certification period covered.
- In performing this contract, the Contractor (4) recognizes that its employees may have access to data, either provided by the Department or first generated during contract performance, of a sensitive nature which should not be released without Department approval. If this situation occurs, the Contractor agrees to obtain confidentiality agreements from all affected employees working on requirements under this contract including subcontractors and consultants. Such agreements shall contain provisions which stipulate that each employee agrees not to disclose, either in whole or in part, to any entity external to the Department, Department of Health or the New York State Department of Law, any information or data provided by the Department or first generated by the Contractor under this contract, any site-specific cost information, or any enforcement strategy without first obtaining the written permission of the Department. If a Contractor, through an employee or otherwise, is subpoenaed to testify or produce documents, which could result in such disclosure, the Contractor must provide immediate advance notification to the Department so that the Department can authorize such disclosure or have the opportunity to take action to prevent such disclosure. Such agreements shall be effective for the life of the contract and for a period of five (5) years after completion of the contract.
- (c) <u>Remedies</u> The Department may terminate this contract in whole or in part, if it deems such termination

- necessary to avoid an organizational or personal conflict of interest, or an unauthorized disclosure of information. If the Contractor fails to make required disclosures or misrepresents relevant information to the Department, the Department may terminate the contract, or pursue such other remedies as may be permitted by the terms of Clause I of this Appendix or other applicable provisions of this contract regarding termination.
- (d) The Contractor will be ineligible to make a proposal or bid on a contract for which the Contractor has developed the statement of work or the solicitation package
- (e) The Contractor agrees to insert in each subcontract or consultant agreement placed hereunder (except for subcontracts or consultant agreements for well drilling, fence erecting, plumbing, utility hookups, security guard services, or electrical services) provisions which shall conform substantially to the language of this clause, including this paragraph (e), unless otherwise authorized by the Department.

If this is a contract for work related to action at an inactive hazardous waste site, the following paragraph shall apply to those Contractors whose work requires the application of professional judgment: It does not apply to construction contracts.

- (f) Due to the scope and nature of this contract, the Contractor shall observe the following restrictions on future hazardous waste site contracting for the duration of the contract.
- (1) The Contractor, during the life of the work assignment and for a period of three (3) years after the completion of the work assignment, agrees not to enter into a contract with or to represent any party with respect to any work relating to remedial activities or work pertaining to a site where the Contractor previously performed work for the Department under this contract without the prior written approval of the Department.
- (2) The Contractor agrees in advance that if any bids/proposals are submitted for any work for a third party that would require written approval of the Department prior to entering into a contract because of the restrictions of this clause, then the bids/proposals are submitted at the Contractor's own risk, and no claim shall be made against the Department to recover bid/proposal costs as a direct cost whether the request for authorization to enter into the contract is denied or approved.
- IV. Requests for Payment All requests for payment

by the Contractor must be submitted on forms supplied and approved by the Department. Each payment request must contain such items of information and supporting documentation as are required by the Department, and shall be all-inclusive for the period of time covered by the payment request.

V. Compliance with Federal

requirements To the extent that federal funds are provided to the Contractor or used in paying the Contractor under this contract, the Contractor agrees that it will comply with all applicable federal laws and regulations, including but not limited to those laws and regulations under which the Federal funds were authorized. The Contractor further agrees to insert in any subcontract hereunder, provisions which shall conform substantially to the language of this clause.

- VI. Independent Contractor The Contractor shall have the status of an independent contractor. Accordingly, the Contractor agrees that it will conduct itself in a manner consistent with such status, and that it will neither hold itself out as, nor claim to be, an officer or employee of the Department by reason of this contract. It further agrees that it will not make any claim, demand or application to the Department for any right or privilege applicable to an officer or employee of the Department, including but not limited to worker's compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.
- VII. Article 15-A Requirements The terms contained in this clause shall have the definitions as given in, and shall be construed according to the intent of Article 15-A of the Executive Law, 5 NYCRR Part 140, et. seq., Article 52 of the Environmental Conservation Law and 6 NYCRR Part 615, et. seq., as applicable, and any goals established by this clause are subject to the intent of such laws and regulations.
- (a) If the maximum contract price herein equals or exceeds \$25,000, and this contract is for labor, services, supplies, equipment, or materials; or
- (b) If the maximum contract price herein equals or exceeds \$100,000 and this contract is for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; then
- (c) The affirmative action provisions and equal employment opportunity provisions contained in this paragraph and paragraphs (d) and (e) of this clause shall be applicable within the limitations established by

Executive Law §§312 and 313 and the applicable regulations.

- (1) The Contractor is required to make good faith efforts to subcontract at least _____%_ of the dollar value of this contract to Minority Owned Business Enterprises (MBEs) and at least _____%_ of such value to Women Owned Business Enterprises (WBEs).
- (2) The Contractor is required to make good faith efforts to employ or contractually require any Subcontractor with whom it contracts to make good faith efforts to employ minority group members for at least ______ %___ of, and women for at least ______ %___ of, the workforce hours required to perform the work under this contract.
- (3) The Contractor is required to make good faith efforts to solicit the meaningful participation by enterprises identified in the NYS Directory of Certified Businesses provided by:

Empire State Development Corp.
Div. Minority & Women's Business Development
30 South Pearl Street

Albany, New York 12245

Phone: (518) 292-5250 Fax: (518) 292-5803

and

Empire State Development Corp. 633 Third Avenue New York, NY 10017

Phone: (212) 803-2414 Fax: (212) 803-3223

internet: www.empire.state.ny.us\esd.htm

- (d) The Contractor agrees to include the provisions set forth in paragraphs (a), (b) and
- (c) above and paragraphs (a), (b), and (c) of clause 12 of Appendix A in every subcontract in such a manner that the provisions will be binding upon each Subcontractor as to work under such subcontract. For the purpose of this paragraph, a "subcontract" shall mean an agreement providing for a total expenditure in excess of \$25,000 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon in which a portion of the Contractor's obligation under a State contract is undertaken or assumed.
- (e) The Contractor is required to make good faith efforts to utilize the MBE/WBEs identified in the utilization plan to the extent indicated in such plan, and otherwise to implement it according to its terms. The Contractor is requested to report on such

implementation periodically as provided by the contract, or annually, whichever is more frequent.

VIII. Compliance with applicable laws

- (a) Prior to the commencement of any work under this contract, the Contractor is required to meet all legal requirements necessary in the performance of the contract. This includes but is not limited to compliance with all applicable federal, state and local laws and regulations promulgated thereunder. It is the Contractor's responsibility to obtain any necessary permits, or other authorizations. By signing this contract, the Contractor affirmatively represents that it has complied with said laws, unless it advises the Department otherwise, in writing. The Department signs this contract in reliance upon this representation.
- (b) During the term of this contract, and any extensions thereof, the Contractor must remain in compliance with said laws. A failure to notify the Department of noncompliance of which the Contractor was or should have been aware, may be considered a material breach of this contract.
- IX. **Dispute Resolution** The parties agree to the following steps, or as many as are necessary to resolve disputes between the Department and the Contractor.
- (a) The Contractor specifically agrees to submit, in the first instance, any dispute relating to this contract to the designated individual, who shall render a written decision and furnish a copy thereof to the Contractor.
- (1) The Contractor must request such decision in writing no more than fifteen days after it knew or should have known of the facts which are the basis of the dispute.
- (2) The decision of the designated individual shall be the final agency determination, unless the Contractor files a written appeal of that decision with the designated appeal individual ("DAI") within twenty days of receipt of that decision.
- (b) Upon receipt of the written appeal, the DAI, will review the record and decision. Following divisional procedures in effect at that time, the DAI will take one of the following actions, with written notice to the Contractor.
- (1) Remand the matter to the program staff for further negotiation or information if it is determined that the matter is not ripe for review; or

- (2) Determine that there is no need for further action, and that the determination of the designated individual is confirmed; or
- (3) Make a determination on the record as it exists.
- (c) The decision of the DAI shall be the final agency decision unless the Contractor files a written appeal of that decision with the Chair of the Contract Review Committee ("CRC") within twenty days of receipt of that decision.

The designated individual to hear disputes is:

(Name and Title)

(Address)

(Telephone)

The designated appeal individual to review decisions is:

(Name and Title)

(Address)

(Telephone)

The Chair of the Contract Review Committee is:

Department of Environmental Conservation Nancy W. Lussier, Chair Contract Review Committee 625 Broadway, 10th Floor Albany, NY 12233-5010 Telephone: (518) 402-9228

- (d) Upon receipt of the written appeal, the Chair of the CRC, in consultation with the members of the CRC and the Office of General Counsel, will take one of the following actions, or a combination thereof, with written notice to the Contractor.
- (1) Remand the matter to program staff for additional fact finding,negotiation, or other appropriate action; or

- (2) Adopt the decision of the DAI; or
- (3) Consider the matter for review by the CRC in accordance with its procedures.
- (e) Following a decision to proceed pursuant to (d) 3, above, the Chair of the CRC shall convene a proceeding in accordance with the CRC's established contract dispute resolution guidelines. The proceeding will provide the Contractor with an opportunity to be heard.
- (f) Following a decision pursuant to (d) 2 or (d) 3, the CRC shall make a written recommendation to the Assistant Commissioner for Administration who shall render the final agency determination.
- (g) At any time during the dispute resolution process, and upon mutual agreement of the parties, the Office of Hearings and Mediation Services (OHMS) may be requested to provide mediation services or other appropriate means to assist in resolving the dispute. Any findings or recommendations made by the OHMS will not be binding on either party.
- (h) Final agency determinations shall be subject to review only pursuant to Article 78 of the Civil Practice Law and Rules.
- (i) Pending final determination of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract in accordance with the decision of the designated individual. Nothing in this Contract shall be construed as making final the decision of any administrative officer upon a question of law.
- (j) (1) Notwithstanding the foregoing, at the option of the Contractor, the following shall be subject to review by the CRC: Disputes arising under Article 15-A of the Executive Law (Minority and Women Owned Business participation), the Department's determination with respect to the adequacy of the Contractor's Utilization Plan, or the Contractor's showing of good faith efforts to comply therewith. A request for a review before the CRC should be made, in writing, within twenty days of receipt of the Department's determination.
- (2) The CRC will promptly convene a review in accordance with Article 15-A of the Executive Law and the regulations promulgated thereunder.

X. Labor Law Provisions

(a) When applicable, the Contractor shall post, in a

- location designated by the Department, a copy of the New York State Department of Labor schedules of prevailing wages and supplements for this project, a copy of all re-determinations of such schedules for the project, the Workers' Compensation Law Section 51 notice, all other notices required by law to be posted at the site, the Department of Labor notice that this project is a public work project on which each worker is entitled to receive the prevailing wages and supplements for their occupation, and all other notices which the Department directs the Contractor to post. The Contractor shall provide a surface for such notices which is satisfactory to the Department. The Contractor shall maintain such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. Contractor shall post such notices before commencing any work on the site and shall maintain such notices until all work on the site is complete.
- (b) When appropriate, contractor shall distribute to each worker for this Contract a notice, in a form provided by the Department, that this project is a public work project on which each worker is entitled to receive the prevailing wage and supplements for the occupation at which he or she is working. Worker includes employees of Contractor and all Subcontractors and all employees of suppliers entering the site. Such notice shall be distributed to each worker before they start performing any work of this contract. At the time of distribution, Contractor shall have each worker sign a statement, in a form provided by the Department, certifying that the worker has received the notice required by this section, which signed statement shall be maintained with the payroll records required by the following paragraph (c).
- (c) Contractor shall maintain on the site the original certified payrolls or certified transcripts thereof which Contractor and all of its Subcontractors are required to maintain pursuant to the New York Labor Law Section 220. Contractor shall maintain with the payrolls or transcripts thereof, the statements signed by each worker pursuant to paragraph (b).
- (d) Within thirty days of issuance of the first payroll, and every thirty days thereafter, the Contractor and every subcontractor must submit a transcript of the original payroll to the Department, which transcript must be subscribed and affirmed as true under penalty of perjury.
- XI. **Offset** In accordance with State Law, the Department has the authority to administratively offset

any monies due it from the Contractor, from payments due to the Contractor under this contract. The Department may also (a) assess interest or late payment charges, and collection fees, if applicable; (b) charge a fee for any dishonored check; (c) refuse to renew certain licenses and permits.

XII. **Tax Exemption** Pursuant to Tax Law Section 1116, the State is exempt from sales and use taxes. A standard state voucher is sufficient evidence thereof. For federal excise taxes, New York's registration Number 14740026K covers tax-free transactions under the Internal Revenue Code.

XIII. **Litigation Support** In the event that the Department becomes involved in litigation related to the subject matter of this contract, the Contractor agrees to provide background support and other litigation support, including but not limited to depositions, appearances, and testimony. Compensation will be negotiated and based on rates established in the contract, or as may otherwise be provided in the contract.

XIV. **Equipment** Any equipment purchased with funds provided under this contract, shall remain the property of the Department, unless otherwise provided in the contract. The Contractor shall be liable for all costs for maintaining the property in good, usable condition. It shall be returned to the Department upon completion of the contract, in such condition, unless the Department elects to sell the equipment to the Contractor, upon mutually agreeable terms.

XV. **Inventions or Discoveries** Any invention or discovery first made in performance of this Contract shall be the property of the Department, unless otherwise provided in the contract. The Contractor agrees to provide the Department with any and all materials related to this property. At the Department's option, the Contractor may be granted a non-exclusive license.

XVI. Patent and Copyright Protection

If any patented or copyrighted material is involved in or results from the performance of this Contract, this Article shall apply.

(a) The Contractor shall, at its expense, defend any suit instituted against the Department and indemnify the Department against any award of damages and costs made against the Department by a final judgment of a court of last resort based on the claim that any of the products, services or consumable supplies furnished by the Contractor under this Contract infringes any patent,

copyright or other proprietary right; provided the Department gives the Contractor:

- (I) prompt written notice of any action, claim or threat of infringement suit, or other suit, and
- (2) the opportunity to take over, settle or defend such action at the Contractor's sole expense, and
- (3) all available information, assistance and authority necessary to the action, at the Contractor's sole expense.

The Contractor shall control the defense of any such suit, including appeals, and all negotiations to effect settlement, but shall keep the Department fully informed concerning the progress of the litigation.

- (b) If the use of any item(s) or parts thereof is held to infringe a patent or copyright and its use is enjoined, or Contractor believes it will be enjoined, the Contractor shall have the right, at its election and expense to take action in the following order of precedence:
- (I) procure for the Department the right to continue using the same item or parts thereof;
- (2) modify the same so that it becomes non-infringing and of at least the same quality and performance;
- (3) replace the item(s) or parts thereof with noninfringing items of at least the same quality and performance;
- (4) if none of the above remedies are available, discontinue its use and eliminate any future charges or royalties pertaining thereto. The Contractor will buy back the infringing product(s) at the State's book value, or in the event of a lease, the parties shall terminate the lease. If discontinuation or elimination results in the Contractor not being able to perform the Contract, the Contract shall be terminated.
- (c) In the event that an action at law or in equity is commenced against the Department arising out of a claim that the Department's use of any item or material pursuant to or resulting from this Contract infringes any patent, copyright or proprietary right, and such action is forwarded by the Department to the Contractor for defense and indemnification pursuant to this Article, the Department shall copy all pleadings and documents forwarded to the Contractor together with the forwarding correspondence and a copy of this Contract to the Office of the Attorney General of the

State of New York. If upon receipt of such request for defense, or at any time thereafter, the Contractor is of the opinion that the allegations in such action, in whole or in part, are not covered by the indemnification set forth in this Article, the Contractor shall immediately notify the Department and the Office of the Attorney General of the State of New York in writing and shall specify to what extent the Contractor believes it is and is not obligated to defend and indemnify under the terms and conditions of this Contract. The Contractor shall in such event protect the interests of the Department and State of New York and secure a continuance to permit the State of New York to appear and defend its interests in cooperation with Contractor as is appropriate, including any jurisdictional defenses which the Department and State shall have.

- (d) The Contractor shall, however, have no liability to the Department under this Article if any infringement is based upon or arises out of: (1) compliance with designs, plans, or specifications furnished by or on behalf of the Department as to the items; (2) alterations of the items by the Department; (3) failure of the Department to use updated items provided by the Contractor for avoiding infringement; (4) use of items in combination with apparatus or devices not delivered by the Contractor; (5) use of items in a manner for which the same were neither designed nor contemplated; or (6) a patent or copyright in which the Department or any affiliate or subsidiary of the Department has any direct or indirect interest by license or otherwise.
- (e) The foregoing states the Contractor's entire liability for, or resulting from, patent or copyright infringement or claim thereof.

XVII. **Force Majeure** The term Force Majeure shall include acts of God, work stoppages due to labor disputes or strikes, fires, explosions, epidemics, riots, war rebellion, sabotage or the like. If a failure of or delay in performance by either party results from the occurrence of a Force Majeure event, the delay shall be excused and the time for performance extended by a period equivalent to the time lost because of the Force majeure event, if and to the extent that:

- (a) The delay or failure was beyond the control of the party affected and not due to its fault or negligence; and
- (b) The delay or failure was not extended because of the affected party's failure to use all reasonable diligence to overcome the obstacle or to resume performance immediately after such obstacle was overcome; and

(c) The affected party provides notice within (5) days of the onset of the event, that it is invoking the protection of this provision.

XVIII. **Freedom of Information Requests** The Contractor agrees to provide the Department with any records which must be released in order to comply with a request pursuant to the Freedom of Information Law. The Department will provide the contractor with an opportunity to identify material which may be protected from release and to support its position.

XIX. **Precedence** In the event of a conflict between the terms of this Appendix B and the terms of the Contract (including any and all attachments thereto and amendments thereof, but not including Appendix A), the terms of this Appendix B shall control. In the event of a conflict between the terms of this Appendix B, and the terms of Appendix A, the terms of Appendix A shall control.

SECTION VIII

General Conditions

ARTICLE 1 - Preliminary Matters

Copies of Documents:

1.1 Department shall furnish to Contractor without charge up to five copies of the Contract Documents. Additional copies of the Contract Documents will be furnished, upon request, at the cost of reproduction.

Preconstruction Conference:

- 1.2 No later than twenty calendar days after the Effective Date of the Agreement, but before Contractor starts the Work, a conference will be held on a date and at a location set by Department to:
 - 1.2.1 Review, item by item, the requirements of this Article;
 - 1.2.2 Review the qualifications of Contractor's resident superintendent and the qualifications of any Subcontractors and Suppliers of Contractor;
 - 1.2.3 Discuss Contractor's plans for complying with the requirements of Article 5 of the General Conditions;
 - 1.2.4 Formalize procedures for processing of Administrative Agreements, Payment Applications, Shop Drawings and other submittals, Change Orders and Proposed Change Orders, and Contractor requests for clarifications and interpretation of Contract Documents;
 - 1.2.5 Establish a working understanding among the parties as to the Work; and
 - 1.2.6 Discuss any conflicts, errors or discrepancies that Contractor has discovered by review of the Contract Documents.

Commencement of Contract Time and Start of Work at Site:

- 1.3 Before starting, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. Contractor shall immediately report in writing to Engineer any conflict, error or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
- 1.4 Before a Contractor may commence Work on the site but no later than 10 calendar days after Notice of Award, Contractor shall submit to Engineer for review and acceptance:
 - 1.4.1 An interim progress schedule indicating Contractor's anticipated schedule for the Work for the first three months in detail and for the remainder of the Work in summary form. If Contractor doesn't intend to perform Work on the date when Contract Time commences, Contractor must notify Department as soon as possible in writing when work will commence so inspection services can be

- scheduled to minimize cost to the Department. The interim progress schedule shall include the information specified in paragraphs 1.4.2 and 1.4.3.
- 1.4.2 An interim schedule of Shop Drawing, material, soil characteristic, sample collection and analytical test result submissions covering the various stages of Work detailed in the first three months of the interim Progress Schedule; and
- 1.4.3 An interim schedule of values on the form provided by Engineer covering the various stages of Work detailed in the first three months of the interim Progress Schedule. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by Contractor at the time of submission.
- 1.5 Contractor shall start to perform the Work on the date specified in the Notice to Proceed in a manner consistent with the Contract Documents. No Work shall be done prior to the date specified in the Notice to Proceed unless written permission to do so is given by the Department to the Contractor.

Finalizing Interim Schedules:

1.6 Contractor shall submit a proposed progress schedule to finalize the interim schedules submitted in accordance with paragraph 1.4 and the requirements of the Progress Schedule Section of the Standard Specification no later than twenty days after starting work at the site. The progress schedule shall be acceptable to Engineer and Department as providing an orderly progression of the Work to completion within the Contract Time, but such acceptance will not relieve Contractor from full responsibility for the progress or scheduling of the Work. The schedule of Shop Drawing, material, soil characteristic, sample collection, and analytical test results submissions shall be acceptable to Engineer and Department as providing a workable arrangement for processing the submissions. The schedule of values shall be acceptable to Engineer and Department as to form and substance. The first Application for Payment shall not be processed unless Contractor has submitted acceptable schedules.

ARTICLE 2 - Contract Documents: Intent, Amending, Reuse

Intent:

- 2.1 The Contract Documents comprise the entire agreement between Department and Contractor concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- 2.2 The Contract Documents describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any work, materials or equipment that may be necessary to satisfactorily complete the contract must be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Laws of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or Laws in effect at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids), even though reference may be specifically made to an earlier standard. If there is any conflict or discrepancy between standard specifications, manuals, or codes of any technical society, organization or association, or between Laws, the Engineer shall determine which shall apply and shall be binding on Contractor. Contractor has a duty to comply with the latest standard specification, manual, code, or Laws in effect at the time of opening of bids, without any increase in Contract Price or extension in Contract Time.

Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in paragraph 8.4. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of Department, Contractor or Engineer or any of their consultants, agents or employees from those set forth in the Contract Documents. If there is any conflict or discrepancy between the provisions of the Contract Documents and any such referenced standard specification, manual, or code of any technical society, organization or association, the provisions of the Contract Documents will take precedence.

2.3 If during the performance of the Work, Contractor finds a conflict, error or discrepancy in the Contract Documents, Contractor shall so report to Engineer in writing at once and before proceeding with the Work affected thereby, and shall obtain a written interpretation or clarification.

Engineer will promptly investigate the matter and respond to Contractor. Until such interpretation or clarification is obtained from Engineer, any Work done by Contractor after the discovery of such a conflict, error or discrepancy, which is directly or indirectly affected by same, will be at Contractor's own risk and Contractor shall bear all cost arising therefrom. In resolving such conflicts, errors or discrepancies, the Contract Documents shall be given preference in the following order:

- 2.3.1 First, in accordance with the order of preference stated in the conflicting parts of the Contract Documents as provided by Article 4 of the Agreement;
- 2.3.2 In all cases, figured dimensions shall govern over scaled dimensions, but Work not dimensioned shall be as directed, and Work not particularly shown, identified, sized, or located shall be the same as similar parts that are shown or specified. Detail Drawings shall govern over general Drawings, larger scale Drawings take precedence over smaller scale Drawings, Change Order or Proposed Change Order Drawings govern over Contract Drawings, and approved Shop Drawings govern over Contract Drawings. Specifications shall govern as to products, execution and workmanship, and Drawings shall govern as to locations, dimensions, or quantities to be furnished. Further, in all cases where specifications, notes or details in two or more Specifications, or in two or more Drawings, conflict, the requirement calling for the larger quantities, or higher quality product or workmanship shall prevail and be binding on Contractor, unless otherwise directed by Engineer.

Amending and Supplementing Contract Documents:

- 2.4 The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways as defined in Section 2, "Terms and Definitions."
 - 2.4.1 An Administrative Agreement,
 - 2.4.2 A Change Order (pursuant to Article 9), or
 - 2.4.3 A Proposed Change Order signed by Department (pursuant to Article 9).

Contract Price and Contract Time may only be changed by a Change Order.

2.5 In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, not involving an adjustment in Contract Price or Contract Time, in one or more of the following ways:

- 2.5.1 A Field Order (pursuant to Article 8.4),
- 2.5.2 Engineer's approval of a Shop Drawing or sample (pursuant to Article 5.23 thru 5.29), or
- 2.5.3 Engineer's written interpretation or clarification (pursuant to Article 8.3).

Reuse of Documents:

2.6 Neither Contractor nor any Subcontractor or Supplier or other person or organization shall have or acquire any title to or ownership rights in any of the Drawings, specifications or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Design Engineer; and they shall not reuse any of them on extensions of the Project or any other project without the written consent of Engineer or, and Department.

ARTICLE 3 - Availability of Lands; Physical Conditions; Reference Points

Availability of Lands:

- 3.1 As indicated in the Contract Documents, Department shall make available the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands as are designated for the use of Contractor. Easements or other authority for permanent structures or permanent changes in existing facilities will be obtained and paid for by Department, unless otherwise provided in the Contract Documents. If Contractor believes that any delay in Department's furnishing of these lands or easements entitles Contractor to an extension of the Contract Time, Contractor may make a request therefore as provided in Article 10 of the General Conditions. If Department and Contractor are unable to agree concerning such an extension, a claim may be made as provided in Articles 9, 10 and 11 of the General Conditions.
- 3.2 Any lands and easements for access not furnished by Department which Contractor deems necessary for the Work, including but not limited to requirements for temporary construction facilities, access and egress, or for storage of materials, shall be provided by Contractor at no increase in Contract Price nor extension in Contract Time. Contractor shall obtain all necessary permits and written approvals from the appropriate jurisdictional agencies and property owner(s) for use of premises not furnished by Department as described above, and for the use of all off-site areas needed for the Work including but not limited to off-site borrow pits, and waste and disposal areas. If permits and approvals do not specify the required treatment, if any, of said areas during and at the completion of the Work, the Progress Schedule must describe such treatment. Copies of all permits and approvals applicable to said areas shall be filed with the Engineer before utilization of any said areas. Contractor shall have sole responsibility for any property damage or personal injuries occasioned by an act or omission of Contractor in respect to all lands, and easements obtained pursuant to this paragraph.
- 3.3 Engineering survey horizontal and vertical control reference points for construction which are specified in the Contract Documents or which in Engineer's judgment are necessary to enable Contractor to proceed with the Work, will be provided by Department. Contractor shall be responsible for laying out the Work using such reference points, shall protect and preserve the established reference points; and shall make no changes or relocations without the prior written approval of Engineer. Contractor shall notify Engineer in writing whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations; and shall be responsible for the accurate replacement or relocation of such reference points by a professionally qualified surveyor at Contractor's expense.

Physical Conditions and Existing Structures:

- Explorations and Reports: Reference is made to the Supplementary Bidding Information and Requirements for identification of those reports of explorations and tests of conditions at the site that have been utilized by Design Engineer in preparation of the Contract Documents; and for identification of those drawings of physical conditions in or relating to existing surface structures (except Underground Facilities referred to in paragraphs 3.6 and 3.7) which are at or contiguous to the site that have been utilized by Design Engineer in preparation of the Contract Documents. Contractor may rely upon the accuracy of the technical data contained in such reports, as to the location where and at the point in time when data was obtained, but not upon non-technical data, interpretations or opinions contained therein or for the completeness thereof for Contractor's purposes. Except as indicated in the Bidding Information and Requirements Section and in paragraphs 3.11 and 3.12, Contractor shall have full responsibility with respect to subsurface conditions which Contractor could reasonably expect or foresee by reason of the technical data and Contractor's inspection of the site, and with respect to physical conditions in or relating to such surface structures.
- 3.5 Intentionally left blank.

Physical Conditions - Underground Facilities Shown or Indicated:

- 3.6 The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to the Design Engineer by the owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 3.6.1 Department shall not be responsible for the accuracy or completeness of any such information or data; and,
 - 3.6.2 Contractor shall have responsibility: a) for reviewing and checking all such information and data; b) for locating all Underground Facilities shown or indicated in the Contract Documents as to depth and alignment in advance of installations, backfilling or other work required by the Contract Documents; c) for coordination of the Work with the owners of such Underground Facilities during construction, d) for the safety and protection thereof, and e) for repairing any damage thereto resulting from the Work. The cost of and the time required to perform the responsibilities outlined in this paragraph will be considered as having been included in the Contract Price and in Contractor's schedule for the performance of the Work within the prescribed Contract Time(s) and Contractor shall not be entitled to additional payment therefor.
 - 3.6.3 Contractor shall excavate and uncover all Underground Facilities to be crossed or paralleled by the proposed Work a sufficient time in advance to permit change in line and grade of the existing Underground Facility or the proposed Work if the location of the existing Underground Facility should interfere with the Work. Further, a reasonable interval of time, up to thirty days, will be allowed to Engineer and Department in order to resolve issues relating to Underground Facilities shown or indicated which are determined to interfere with the Work. This interval of time will be considered as having been included in the Contract Price and in Contractor's schedule for the performance of the Work within the Contract Time unless otherwise agreed to in writing by Department. If more than thirty days is consumed in resolving such issues, no claim will be allowed unless: 1) Contractor has given the notice required in paragraph 3.7 of the General Conditions, and 2) within fifteen days thereafter, Contractor has submitted to Department a written Proposed Change Order claim in accordance with the requirement of Article 9, 10 and 11 of the General Conditions and the Standard Specifications.

- 3.6.4 Where it is necessary for the Work to be close to or between other underground facilities or structures for short distances, Contractor shall shore, block, and protect the other underground facilities or structures to the satisfaction of the utility agency, state agency, municipality or private owner having ownership or jurisdiction over said underground facilities on structures.
- 3.6.5 Access to various municipal structures shall not be obstructed by Contractor to prevent use of hydrants, valves, manholes, fire alarms, etc. Contractor is to make no connections to existing water mains, or operate valves on existing mains, or otherwise interfere with the operation of the existing water distribution system, without first giving written notice to the owners of such municipal structures and securing their written approval of the proposed action.

Underground Facilities Not Shown or Indicated:

- 3.7 If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which Contractor could not reasonably have been expected to be aware of, Contractor shall promptly after learning thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 5.22), identify the owner of such Underground Facility and give written notice of such uncovering to that owner and to Engineer and Department. Engineer and Department will promptly review the situation to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and take prompt action to amend the Contract Documents to the extent necessary. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 5.20.
 - 3.7.1 Contractor shall schedule excavation and uncovering Work to begin a sufficient time in advance to allow Engineer's review and the possible amendment to the Contract Documents if unanticipated Underground Facilities are discovered as described in paragraph 3.7. Further, up to thirty days, will be allowed to Engineer and Department to resolve issues and problems related to a report of newly discovered Underground Facilities, not shown or indicated. This interval of time will be considered as having been included in the Contract Price and in Contractor's schedule for the performance of the Work within the Contract Time and Contractor shall not be entitled to any additional payment therefor.
 - 3.7.2 No claim by Contractor under paragraph 3.7 of the General Conditions will be allowed unless more than thirty days has elapsed and 1) Contractor has given the notice required in paragraph 3.7 of the General Conditions, and 2) within fifteen days thereafter, Contractor has submitted to Department a written Proposed Change Order claim in accordance with the requirements of Articles 8, 9, 10 and 11 of the General Conditions, and the Standard Specifications.

Report of Differing Site Conditions:

- 3.8 If Contractor believes that any subsurface or physical condition uncovered or revealed at the site renders materially inaccurate any information in the Contract Documents or technical data on which Contractor was entitled to rely as provided in paragraph 3.4 or 3.6, Contractor shall, immediately after becoming aware thereof and before performing any Work in connection therewith (except in an emergency as permitted by paragraph 5.22), notify Department and Engineer in writing about the inaccuracy or difference to allow Department and Engineer to make any necessary changes to minimize the cost of the Work.
- 3.9 Engineer's and Department's Review: Engineer and Department will promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto, and

- notify Contractor in writing of findings and conclusions. Immediately thereafter, Department shall perform or cause to be performed any necessary or appropriate additional investigations and tests with respect to the newly discovered conditions and furnish copies to Contractor.
- 3.10 Possible Document Change: If Engineer concludes that there is a material error in the Contract Documents or that because of newly discovered conditions a change in the Contract Documents is required, a Proposed Change Order or a Change Order will be issued as provided in Article 9 to reflect and document the consequences of the inaccuracy or difference, provided Department has not exercised its right to suspend or terminate under Article 14 of Section 8, "General Conditions", Appendix B, or Article 12 of Section 6 "Agreement."
- 3.11 Possible Contract Adjustment: An increase or decrease in the cost of, or the time required to perform any part of the Work, whether or not affected by such differing conditions, and a corresponding adjustment in Contract Price or Contract Time in accordance with Articles 9, 10 and 11 of the General Conditions, or any combination thereof, may be allowable to the extent that they are attributable to any such inaccuracy or difference which Contractor could not reasonably have been expected to anticipate or be aware of. If Department and Contractor are unable to agree as to the adjustment in Contract Price or Contract Time, or if Engineer concludes that there is not a material error in the Contract Documents, or that the uncovered or revealed condition could reasonably have been anticipated by Contractor, and Contractor disagrees, a claim may be made therefor as provided in Articles 9, 10 and 11 of the General Conditions.
- 3.12 No claim by Contractor under paragraph 3.11 of the General Conditions will be allowed unless: 1) Contractor has given the written notice required in paragraph 3.8 of the General Conditions, and 2) within fifteen days thereafter, Contractor has submitted to Department a written Proposed Change Order substantiating in detail Contractor's proposed adjustments in accordance with the requirements of Articles 9, 10 and 11 of the General Conditions, and the Standard Specifications.
- 3.13 Responsibilities and Allowances: Contractor shall schedule excavation and uncovering of Work to begin a sufficient time in advance to allow Engineer's review as described in paragraph 3.9, and Department's issuance of a Change Order or a Proposed Change Order as described in paragraph 3.10 in connection with a report of differing conditions. Further, a reasonable interval of time, not less than thirty days will be allowed to Engineer and Department for those functions required to resolve any report of differing conditions. This interval of time will be considered as having been included in the Contract Price and in Contractor's schedule for the performance of the Work within the Contract Time. If more than thirty days is used, no claim will be allowed unless (1) Contractor has given the written notice required in paragraph 3.8 of the General Conditions, and (2) within fifteen days thereafter, Contractor has submitted to Department a written Proposed Change Order claim in accordance with the requirements of Articles 8, 9, 10 and 11 of the General Conditions, and the Standard Specifications.

ARTICLE 4 - Bonds and Insurance

Performance and Other Bonds:

4.1 Contractor shall furnish performance, labor and material payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents. These Bonds shall remain in effect until at least one year after the date when final payment is made, unless otherwise provided by Law or by the Contract Documents. Contractor shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall: a) be in the form prescribed by the Contract Documents; and b) be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and As

Acceptable Reinsuring Companies" as published by the U.S. Treasury Department. Also the surety shall be licensed to do business in New York State. All Bonds signed by an agent must be accompanied by an original or a certified true copy of the agent's power of attorney. Contractor's failure to submit and keep in effect a Bond or form of financial security acceptable to Department in the manner required by this paragraph shall be cause for termination. Contractor shall give written notice to Department and reference the site number and project name, if the surety on any Bond furnished by Contractor is declared bankrupt, becomes insolvent, its right to do business is involuntarily terminated by any state or federal agency, it ceases to meet the requirements of paragraph 4.1, Contractor, if required by Department, shall within fourteen days substitute another Bond or Surety, in an acceptable form of financial security. The top of all bonds shall have "NYSDEC-DER Site No."

If the provision of any bond requires that the surety be notified of any change in the Work, it shall be Contractor's responsibility to so notify the surety. Contractor shall furnish Department any modified bond.

Insurance - All Types:

- 4.2 Contractor shall purchase and maintain at its own expense the specific coverages and types of insurance set forth in this Article 4.2 through 4.3.3.
 - 4.2.1 Contractor shall not commence or continue to perform any work unless and until Contractor has in full force and effect all required insurance, and until Contractor has submitted true copies of all endorsements (i.e., amendments) and a copy of the Certificate of Insurance attached herein to Department evidencing the specific insurance coverage required. No payment for work performed shall become due and payable unless current certificates and endorsements have been received.
 - 4.2.2 Contractor shall not permit any Subcontractor, Supplier or other person or organization to perform Work unless the following insurance requirements at a minimum have been complied with by such Subcontractor, Supplier or other person or organization and proof of the issuance of all policies of insurance has been delivered to Contractor.
 - 4.2.2.1 Comprehensive general liability insurance providing coverage as herein required of Contractor including Contractors' Protective Liability Insurance, Completed Operations Insurance, Products Liability Insurance and Contractual Liability Insurance. Insurance must be project specific or contain an endorsement (i.e., amendment) in writing (including print or stamp) added to and made part of the insurance contract for the purpose of changing the original terms such that the general aggregate limit applies separately to each of Contractor's projects away from premises owned by or rented to Contractor.

Commercial General liability insurance with a limit of not less than \$1,000,000 each occurrence. Such liability shall be written on the Insurance Service Office's (ISO) liability arising from premises operations, independent contractors' operations, products-completed operations, broad form property damage, personal and advertising injury, cross liability coverage, liability assumed in a contract (including tort liability of another assumed in a contract) and explosion, collapse and underground coverage.

• Products and Completed Operations Coverage shall include a provision that coverage will extend for a period of at least twelve (12) months after the date of final completion and acceptance by the Department of all of Contractor's work.

- 4.2.2.2 Comprehensive Business automobile liability insurance with a limit of not less than \$1,000,000 with Department and Engineer listed as an additional insured.
- 4.2.2.3 Policy covering the obligations of the Contractor in accordance with the provisions of the Worker's Compensation Law, Employers Liability, and Disability Benefits This contract shall be void and of no effect unless the Contractor procures the Workers Compensation policy and maintains it until final acceptance of the work.

The only forms which are accepted as proof of Workers' Compensation and Disability Insurance are as follows:

Form #	Form Title
C 105.2	Contificate of Worker's Componentian Insurance
C-105.2	Certificate of Worker's Compensation Insurance
CE-200	Certificate of Attestation of Exemption – (no employees)
U-26.3	State Insurance Fund Version of the C-105.2 form
SI-12	Certificate of Worker's Compensation Self-Insurance
DB-120.1	Certificate of Disability Benefit Insurance
DB-155	Certificate of Disability Benefit Self-Insurance
GSI-105.2	Certificate of Participation in Worker's Group Comp Self-Insurance

An ACORD form is not acceptable proof of Worker's Compensation coverage All of the above referenced forms, except CE-200,SI-I2 & DB-155 must name: The New York State Department of Environmental Conservation, 625 Broadway, Albany, NY 12233, as the Entity Requesting Proof of Coverage (Entity being listed as the Certificate holder). Additional information can be obtained at the Worker's Compensation website:

http://www.wcb.state.ny.us/content/main/Employers/Employers.jsp

- 4.2.2.4 Owner's (Department's) and Contractor's Protective Liability Insurance issued to and in the name of The People of the State of New York, the Department, and the Engineer with limits not less than \$1,000,000 per occurrence.
- 4.2.2.5 Pollution Liability Insurance: If the work involves abatement, removal, repair, replacement, enclosure, encapsulation and/or disposal of any hazardous material or substance, the Contractor shall maintain in full force and effect throughout the Term, pollution legal liability insurance with limits of not less than \$1,000,000, providing coverage for bodily injury and property damage, including loss of use of damaged property or of property that has not been physically injured. Such policy shall provide coverage for actual, alleged or threatened emission, discharge, dispersal, seepage, release or escape of pollutants or in the investigation, settlement or defense of any claim, suit, or proceedings against the State of New York and/or the Department and/or the Engineer, arising from Contractor's work and list Department as an additional insured. Claims made policies shall have a one (1) year tail beyond the date Department determines physical completion.
 - If coverage is written on claims-made policy, the Contractor warrants that any
 applicable retroactive date precedes the effective date of this Contract; and that
 continuous coverage will be maintained, or an extended discovery period

exercised, for a period of not less than two years from the time work under this Contract is completed.

- 4.2.2.6 Errors and Omissions: If providing professional services, Contractor shall maintain, or if subcontracting professional services, shall certify that its subcontractor maintain errors and omissions liability insurance with a limit not less than \$1,000,000 per loss.
 - Such insurance shall apply to professional errors, acts or omissions arising out
 of the scope of services covered by this contract and may not exclude bodily
 injury, property damage, pollution or asbestos related claims, testing,
 monitoring, measuring or laboratory analyses.
 - If coverage is written on a claims-made policy, the Contractor warrants that any
 applicable retroactive date precedes the effective date of this contract; and that
 continuous coverage will be maintained, or an extended discovery period
 exercised for a period not less than two years from the time the work under this
 contract is completed.
- 4.2.3 Insurance shall be issued by carriers licensed to do business in New York State. Each insurance carrier must be rated at least "A-" Class "VII" in the most recently published Best's Insurance Report. If during the term of the policy, a carrier's rating falls below "A-" Class VII, the insurance must be replaced no later than the renewal date of the policy, with an insurer acceptable to the Department and rated at least "A-" Class VII in the referenced report.
- 4.2.4 Acceptance by Department of the insurance provided by Contractor shall not relieve Contractor from liabilities, obligations, responsibilities or decrease the liabilities of Contractor hereunder. It is understood that Department does not in any way represent that the insurance or the limits of insurance specified in the Article is sufficient or adequate to protect Contractor's interests or liabilities, but are merely minima.
- 4.2.5 All insurance shall be maintained in full force and effect until the Contract has been fully and completely performed, as set forth in the Contract Documents. Completed operations insurance shall remain in effect until one year after the date of final acceptance of work under the contract, or one year after Contractor or any Subcontractor performs any work under the Contract, whichever is later. Should any coverage approach expiration during the period in which it must remain in full force and effect, it shall be renewed prior to its expiration, and a certificate again filed with Department. Also, any endorsements (i.e., amendments) which change insurance during the length of the contract shall also be submitted to Department for acceptance. All insurance policies shall require notice to Department 30 days prior to expiration, termination, or suspension of such policy, directed to the attention of Department. If any insurance provided hereunder contains an aggregate limit, the aggregate shall apply separately to this contract and shall not be less than \$2,000,000. Expiration of any coverage shall be grounds for termination of contract for cause, at the option of Department. Department may suspend or terminate this contract unless Contractor maintains in full force and effect, the types and amounts of insurance required by this contract. No later than thirty (30) days prior to the expiration or renewal date of policy the Contractor should supply replacement certificates of insurance.
- 4.2.6 Contractor shall deliver, if requested by Department, duplicate originals of each policy required by Contract Documents, as well as insurance policies of Subcontractors, in such number as Department may require, and such alternate or additional proof of coverage as Department

- demands. Contractor shall provide prompt, written notice to the Department and its insurer, of any claims made related to work done hereunder, in accordance with the insurance policy provisions.
- 4.2.7 Nothing contained in these insurance requirements shall be construed to limit the liability of Contractor or Contractor's insurance carriers.
- 4.3 If required by the Supplementary Conditions or Law, Contractor shall purchase and maintain at its own expense insurance otherwise deemed necessary by Department with Department listed as an additional insured.
 - 4.3.1 Where special or unusual hazards peculiar to this contract are foreseeable, Contractor shall take such steps as are necessary to insure itself against such hazards and be responsible for any damage, including water, which results from the occurrence of the hazards in connection with the performance of Work under the Contract.
 - 4.3.2 Contractor shall purchase and maintain insurance which complies with the requirements of the Flood Disaster Protection Act.
 - 4.3.3 Contractor shall maintain until the physical completion date builder's risk insurance on the Builder's Risk Completed Values Form with extended coverage, on the value of the work which shall be the contract amount. Whenever applicable, the Contractor's Interest Completed Value Form may be used. The extended coverage endorsement may include a loss deductible clause of \$100.00. Department shall be listed as an additional insured. The Builder's Risk policy shall include the following endorsement. "It is made a condition of this insurance that occupancy of the premises shall not require consent of the insurance company nor rate of adjustment."

ARTICLE 5 - Contractor's Responsibilities

Supervision and Superintendence:

- 5.1 Contractor shall supervise and direct the Work required by the contract competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be responsible for the means, methods, techniques, sequences and procedures of construction; except that Contractor shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. Contractor shall be responsible to see that the finished Work conforms with the Contract Documents.
- 5.2 Contractor shall keep on the Site of the Work at all times during its progress, a competent and reliable resident superintendent, who shall not be replaced without written approval of Department. The superintendent will be Contractor's representative at the site and shall have authority to act on behalf of Contractor. All communications given to the superintendent shall be as binding as if given to Contractor.
 - 5.2.1 Department may require immediate replacement of the superintendent upon written notice for cause.
 - 5.2.2 The superintendent and similar authorized representatives of any Subcontractors as requested by Department or Engineer shall attend all meetings pertaining to the Work.

- 5.2.3 Whenever the superintendent is not present for performance of a particular part of the Work and Engineer is not able to give to Contractor, through the superintendent, information relative to an interpretation of the Contract Documents, or relative to disapproval or rejection of materials or the performance of such work, Engineer may so inform the worker in charge of such Work. Information so given shall be binding as if given to superintendent.
- 5.2.4 Contractor shall issue all communications to Department through Engineer except as provided by Contract Documents. All written correspondence to Engineer shall be copied to Department.

Labor, Working Hours, Materials and Equipment:

- 5.3 Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall, at all times, employ labor and equipment which shall be sufficient to prosecute the several classes of work to full completion in the manner and time specified. All workers must have sufficient skill, experience and Health and Safety training required to perform properly the work assigned them. All workers engaged on special or skilled work shall have had sufficient experience in such work to perform properly and satisfactorily including operation of any equipment involved. Any person employed by Contractor or Subcontractor whom the Engineer or Department may determine incompetent or unfit to perform the work shall be at once discharged or reassigned and not again be employed on Work in connection with this Contract. The Contractor may request review by Department regarding the discharge of such employee(s). Contractor shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during normal working hours as defined in paragraph 5.3.1 below, and Contractor shall not permit overtime Work or the performance of Work during hours other than normal Working hours without: a) prior written notice to Engineer; b) Department's written consent; and c) written approval from the New York State Department of Labor as required by law.
 - 5.3.1 Normal working hours shall be defined as a normal working schedule which a) does not exceed eight hours per working day, occurring between the hours set forth at the pre-construction conference, or if none are set forth, beginning no earlier than 7:00 a.m. and ending at no later than 5:00 p.m.; and b) does not exceed 40 hours per week, excluding overtime Work, Work on Saturdays, Sundays, and legal holidays (New Years, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas). Work during other than normal working hours may be scheduled by Contractor by first obtaining written permission from Department and as provided in Section 5.3. Department shall be entitled to recover extra costs incurred in providing inspection related to Work done during other than normal working hours in accordance with paragraph 5.3.5 below.
 - 5.3.2 If Contractor, for convenience, voluntarily chooses to schedule Work during hours other than normal working hours at no increase in Contract Price, Contractor shall submit details of such proposed schedule with the interim Progress Schedule described in paragraph 1.6 of the General Conditions. Any Progress Schedule calling for Work outside of normal working hours shall be reviewed for acceptance by Engineer and Department and must be in accordance with the requirements of the New York State Labor Law and Articles 1.6 and 5.3 of the General Conditions.
 - 5.3.3 If at any time subsequent to the submission and approval of the Progress Schedule pursuant to the General Conditions and the Standard Specifications, an event or delay not meeting the requirements for extensions in Contract Time set forth in Articles 9, 10 and 11 of the General Conditions occurs, and requires Contractor to schedule Work during hours other than normal

- working hours for Contractor's convenience and at no increase in Contract Price, Contractor shall submit, at least ten working days in advance of the acceleration period, a proposed revised accelerated schedule for review by Engineer and Department. If Department accepts the revised accelerated Progress Schedule, Department will so notify Contractor in writing.
- 5.3.4 If the accelerated Progress Schedule pursuant to paragraph 5.3.2 or 5.3.3 is accepted by Department, Contractor shall reimburse Department for all extra costs incurred in providing inspection during hours other than normal working hours in accordance with paragraph 5.3.5 below. Acceptance by Department of the accelerated Progress Schedule shall not justify an increase in Contract Price; any increase in Contractor's cost to perform the Work, or any part thereof, whether or not affected by Contractor's initiated acceleration proposal, shall remain the responsibility of Contractor.
- 5.3.5 Contractor shall reimburse Department for the extra costs incurred in providing inspection during hours other than normal working hours when Department considers that the additional hours are due to Contractor's inefficiencies or delays. Reimbursement may include but may not be limited to costs for Engineer, Resident Project Representatives, administrative expenses and other related costs. Reimbursement for Engineer's charges shall be in amounts equal to Engineer's charges to Department for inspection during hours other than normal working hours under the terms of Engineer's agreement with Department. In the event Contractor fails to pay such costs within 30 days after receipt of an invoice from Department, a Change Order or Proposed Change Order may be issued incorporating the unpaid amounts, and Department shall be entitled to an appropriate decrease in Contract Price.
- 5.3.6 Department may direct Contractor to accelerate if the progress of Work indicates Contractor may not be able to complete the contract within the contract terms. Contractor shall be responsible for all increased costs due to the acceleration.
- 5.4 Unless otherwise specified in the Contract Documents, Contractor shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, storage areas, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.
 - 5.4.1 All water for testing, flushing and construction shall be furnished by Contractor. If water is available from Department and Department agrees to its use, Contractor shall connect to Department's water system at a point approved by Department. Department will charge Contractor for water used in performing the above functions in accordance with Department's established rate schedule. There shall be installed at each and every connection to any water supply: (a) a meter accepted by Department or Owner of water supply, and (b) a backflow preventer device accepted by the New York State Department of Health.
 - 5.4.2 In the event that Contractor wishes to utilize water from Department's facilities as a substitute source of test water, Contractor shall submit sufficient information in accordance with paragraph 5.7.2 of the General Conditions to allow Engineer to evaluate the substitution. Additionally, such information shall include a description of the necessary equipment and temporary facilities needed to implement the substitute and an estimate of the costs savings anticipated. In the event that the substitution is accepted by Engineer pursuant to the requirements of paragraph 5.7.3 of the General Conditions and allowed by Department, and the supply of water is inadequate in quantity or

- quality, Contractor shall be responsible for obtaining other sources of test water at no increase in Contract Price or extension in Contract Time.
- 5.4.3 Contractor shall light the parts of the Work performed during working hours in the manner required by law and as required by Engineer or Department.
- 5.5 Except as otherwise provided in the Contract Documents, all materials shall be of good quality, good condition and new, and all equipment shall be new, or should be in good working order and of good quality. As required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents.
 - 5.5.1 Contractor shall provide to Department for Department's benefit through Engineer all manufacturers' warranties for materials, and products incorporated into the Work, or required by the Contract Documents to be furnished by Contractor.
 - 5.5.2 Contractor shall obtain from manufacturers of all materials and products complete information as to any special condition, or restriction to be applied in the use of these items. Should the manner or method of installation, specified performance or test results as set forth in the Specifications be contrary to the manufacturer's recommendations for installation and use of the product, the Contractor shall notify Engineer of same for appropriate action. Lack of such notification shall constitute a certification and guarantee by Contractor that Specification requirements will be met by such materials and products to be incorporated.
 - 5.5.3 Contractor shall submit data on all products to be incorporated into the Work required by the Contract Documents, including but not limited to complete maintenance instructions (including preventive maintenance and operating requirement data) and parts lists in sufficient detail to facilitate ordering replacements, in accordance with the procedures set forth in the Special Supplementary Conditions, the Standard Specifications or the Supplementary Specifications.

Adjusting Progress Schedule:

5.6 Contractor shall report on the status of and any revisions to the Progress Schedule to Engineer and Department by delivering Progress Schedule status and update submittals to Engineer in accordance with the Specifications and Article 1.6 of the General Conditions. If Contractor does not adequately update the Schedule, Department may reject Contractor's requests for payment, provided that Department gives Contractor 10 days written notice of its intention to do so.

"Or-Equal" or Substitute Items:

5.7.1 Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, function, quality, performance and design criteria required. Unless the name is followed by words indicating that no "or equal" or substitution is permitted, materials or equipment of other Suppliers may be accepted by Engineer if sufficient information is submitted by Contractor to allow Engineer to determine that the material or equipment proposed is equivalent or equal to that named. The procedure for review by Engineer will include the following as supplemented in the Contract Documents. Requests for review of "or equal" or substitute items of material and equipment will not be accepted by Engineer from anyone other than Contractor. If

Contractor wishes to furnish or use an "or equal" or substitute item of material or equipment, Contractor shall make written application to Engineer for acceptance thereof, certifying that the proposed "or equal" or substitute shall perform the functions and achieve the results called for by the general design, be similar and of equal substance and quality to that specified and be suited to the same use as that specified.

- 5.7.1.1 The application shall state that the evaluation and acceptance by Engineer of the proposed "or equal" or substitute shall not prejudice completion of the Work, or any part thereof, within the Contract Time, or contract times (including Contractor's achievement of Substantial Completion on time), whether or not acceptance of the "or equal" or substitute for use in the Work would require a change in the Work, or any part thereof, or would require the Department or others having a contract with Department for Work on the Project to adapt the Contract Documents to the proposed "or equal" or substitute; and whether or not incorporation or use of the "or equal" or substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed "or equal" or substitute from that specified shall be identified in the application and available maintenance, repair and replacement services shall be indicated. The application shall also contain an itemized estimate of all increases or decreases in the following costs: 1) the cost of, or the time required to perform any part of the Work, and the corresponding adjustments in Contract Price and Contract Time, resulting directly or indirectly from evaluation and acceptance of the proposed substitute, including, but not as a way of limitation, costs and delays associated with redesign, or claims of other contractors affected by the resulting "or equal" or substitute, and 2) increases or decreases in operating, maintenance, repair, replacement or spare part costs, all of which shall be considered by Engineer in evaluating the proposed "or equal" or substitute. In rendering a decision, Department and Engineer shall at a minimum, have access to any available Total Float in the approved Progress Schedule. Engineer may require Contractor to furnish at Contractor's expense additional data about the proposed "or equal" or substitute.
- 5.7.2 If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, Contractor may furnish or utilize a substitute only if first approved by Engineer. Contractor shall submit in writing sufficient information to allow Engineer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedures for review by Engineer established by paragraph 5.7.1, and as may be supplemented in the Contract Documents, will apply to reviews under this paragraph.
- 5.7.3 Engineer shall be allowed a reasonable time as determined by Department within which to evaluate each proposed "or equal" or substitute. Engineer and Department shall be the sole judge of acceptability, and no "or equal" or substitute shall be ordered, installed or utilized without Engineer's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. Department may require Contractor to furnish at Contractor's expense a special performance guarantee or other financial security with respect to any substitute. Engineer will keep record of the time required by Engineer and Engineer's consultants in evaluating "or equals" or substitutions proposed by Contractor and in making changes in the Contract Documents occasioned thereby. Whether or not Engineer accepts an "or equal" or proposed substitute, Department shall be entitled to an offset against any payment due Contractor for the charges of Engineer and Engineer's consultants for evaluating each proposed "or equal" or substitute after the second submittal on such item. In the event that substitute materials or equipment are accepted and

are less costly than the originally specified materials or equipment, then the net difference in cost shall benefit Department, and an appropriate Change Order or Proposed Change Order shall be executed to reflect the difference in cost. If Engineer or Department determine that the deduction proposed by Contractor does not reflect the net difference in cost, then this shall be adequate justification to reject the proposed substitute. Additional construction and/or engineering costs identified after Department's acceptance of the proposal and resulting from installation of an "or equal" or substitute shall be borne by Contractor.

Subcontractors, Suppliers and Others:

- 5.8.1 Contractor shall not employ nor award Work to Subcontractors in excess of the amount specified in Article 6 of the Supplementary Bidding Information and Requirements Section. Such percentage may be increased by an Administrative Agreement if, during performance of the Work, Contractor requests an increase and Department at its sole discretion determines that the increase would be to Department's advantage. Contractor shall submit to Department a statement stating the character and amount of the work to be subcontracted and the party to whom it is proposed to subcontract the work. Contractor shall not employ any Subcontractor, Supplier or other person or organization whether initially or as a substitute, unless first approved by Department.
- 5.8.2 Wherever Work to be performed by Contractor or by a Subcontractor is dependent upon Work of other Subcontractor(s) or the work of separate contractor(s), then Contractor shall require such Subcontractor(s) whose Work is so dependent to:
 - 5.8.2.1 Provide necessary notices of delay, data or other requirement(s) for performance of dependent Work or work of separate contractor(s),
 - 5.8.2.2 Supply and/or install items to be built into dependent Work or work of separate contractor(s),
 - 5.8.2.3 Make provisions for dependent Work or work of separate contractor(s),
 - 5.8.2.4 Examine previously placed dependent Work or work of separate contractor(s),
 - 5.8.2.5 Check and verify dimensions of previously placed dependent Work or work of separate contractor(s),
 - 5.8.2.6 Notify Engineer in writing immediately upon determining previously placed dependent Work or work of separate contractor(s), the dimensions of which are unsatisfactory or will prevent a satisfactory installation of Work,
 - 5.8.2.7 Not proceed with Work until the unsatisfactory dependent conditions which prevent satisfactory installation of Work have been corrected.

Installation of Work by Contractor or by a Subcontractor in any given area shall constitute acceptance by Contractor or by such Subcontractor of all previously placed dependent Work or work of separate contractor(s) and after such acceptance Contractor shall not make any claims for additional costs based on alleged deficiencies in such Work.

- 5.8.3 Whenever other Contractors will perform portion(s) of the work that depend on the Contractor's portion of the Work; Contractor shall provide all of the notices and information listed in 5.8.2 to such other Contractors in a timely manner.
- 5.9 Contractor shall be responsible and liable to Department and Engineer for Contractor's acts and omissions and all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a contract with any level of Subcontractor or Supplier. Nothing in the Contract Documents shall create any contractual relationship between Department or Engineer and any such Subcontractor, Supplier or other person or organization. Department or Engineer may furnish to any Subcontractor or Supplier, to the extent practicable, evidence of the payments made to Contractor on account of specific Work done.
- 5.10 The various sections, divisions and subdivisions of the Standard and Supplementary Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade. The Standard Specifications, Supplementary Specifications, and Drawings are complementary to each other and are to be read as a whole. Anything mentioned or shown in a division of such Specifications, or Drawings or in a specific trade Drawing shall be effective as if shown in all divisions of such Specifications and in all Drawings. In addition to the requirements of paragraphs 5.24 through 5.30 of the General Conditions, shop drawings of a specific trade shall be compared to and coordinated with those from other trades by Contractor before submission to Engineer.
- 5.11 All Work performed for Contractor by a Subcontractor will be pursuant to an appropriate agreement between Contractor and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of Department.

Patent Fees and Royalties:

5.12 Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, device or intellectual processes which is the subject of patent rights or copyrights held by others, both when a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and otherwise. It is the intent of the parties that whenever Contractor is required or desires to use any design, device, material or process covered by letters, patent, trademark or copyright, the right for such use shall be provided for by suitable legal agreements with the patentee or owner, and a copy of this agreement shall be filed with Engineer. However, whether or not such agreement is made or filed as noted, Contractor and Contractor's surety in all cases shall indemnify and hold harmless Department and Engineer and their employees as provided in Appendix B.

Permits:

5.13 Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for any permits or licenses required for performance of Work. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of Bids, or if there are no Bids on the Effective Date of the Agreement. Contractor shall pay all charges for connections or disconnections required by the Work to Underground Facilities or utilities owned by third parties.

Laws and Regulations:

- 5.14.1 Contractor shall comply with all Laws applicable to performance of the Work. Except where otherwise expressly required by applicable Laws or Contract Documents, neither Department nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws.
- 5.14.2 If Contractor observes that the Contract Documents are at variance with any applicable Laws, Contractor shall immediately give Engineer prompt written notice thereof, and any necessary changes will be authorized by one of the methods set forth in paragraph 2.4 and 2.5 of the General Conditions. If Contractor performs any Work knowing or having reason to know that it is contrary to such Laws, and without such notice to Engineer, Contractor shall bear all costs arising therefrom; however, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws.

Taxes:

5.15 Contractor shall pay all sales, consumer, use and other similar taxes required to be paid by Contractor in accordance with the Laws of the State of New York which are applicable during the performance of the Work. Materials, supplies and equipment incorporated into the Work or sold to New York State are exempt from New York State sales tax.

Use of Premises:

- 5.16 Contractor shall confine the use and storage of construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by applicable Laws, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. Unless otherwise provided in the Contract Documents, use of Department's facilities at or contiguous to the site by Contractor for storage of materials or equipment shall not be permitted. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the acts or omissions of Contractor. Should any claim be made against Department or Engineer by any such owner or occupant because of the performance of the Work, Contractor shall promptly attempt to settle with such other party by agreement or otherwise resolve the Claim. Contractor shall indemnify and hold Department harmless in accordance with the provisions of Appendix B.
 - 5.16.1 Temporary buildings (e.g., storage sheds, trailers, shops, offices) and utilities may be erected by Contractor only with the approval of Engineer and shall be built without additional expense to Department. Such temporary buildings and utilities shall remain the property of Contractor and shall be decontaminated as necessary and removed by Contractor at his expense upon completion of the Work; the buildings and utilities may be abandoned and remain at the site with the written consent of Department.
 - 5.16.2 When materials are transported for performance of the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by Federal, State, or local law or regulation. When it is necessary to cross curbs, sidewalks or work which is completed or underway on site, Contractor shall protect them from damage, and shall repair any damage caused.
 - 5.16.3 Notwithstanding the designation of site boundaries or the indication of temporary fences or barricades, the provisions of the Contract Documents governing certain phases or portions of the Work may require that certain operations be carried out beyond the site boundaries. Trenching, utility Work, site development, landscaping, other Work, if required beyond such designated limits,

shall be scheduled in such a manner as to cause or occasion a minimum of inconvenience or disturbance to or interference with the normal operation of Department, abutting owners and the public. Contractor shall obtain Department's prior approval and all necessary approvals from others, including but not limited to public authorities and utility companies for such operations, and shall conduct such operations expeditiously and restore the affected area to its original condition immediately upon completion of such operations, unless otherwise specified in the Contract Documents.

- 5.16.4 All existing walks, roadways, paved or landscaped areas on which temporary driveways or walks are rerouted shall be restored to their original condition, immediately upon completion of the phases or portions of the Work for which such features were disturbed unless otherwise specified in the Contract Documents.
- 5.16.5 Pumping, draining and control of surface and ground water will be carried out so as to avoid endangering the Work or any adjacent facility or property, or interrupting, restricting or otherwise infringing or interfering with the use thereof, or exceeding the limits allowed by Contract Documents, or applicable Law.
- 5.17 During the progress of the Work, Contractor shall keep the Site free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work Contractor shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the Site clean and ready for Department. Contractor shall restore all pavement, sidewalks, driveways, fences, shrubs, lawns, trees and any other public or private property damaged as a result of the Work under this Contract. All such replacement shall be done in accordance with the applicable specifications and no separate or extra payment will be made unless specifically provided for in the Payment Items. In all cases, said replacement shall be at least equal to the original conditions.
- 5.18 Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

As-Built Documents:

5.19 Contractor shall maintain in a safe place at the Site one as-built document which shall consist of all Drawings, Specifications, Addenda, written amendments, Change Orders, Proposed Change Orders, field test records, construction photographs, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 8.3) in good order and annotated to show all changes made during construction. Contractor will be required to review with Engineer the status of all as-built documents in connection with Engineer's evaluation of an Application for Payment. Pursuant to paragraph 13.2.1 of the General Conditions, failure to maintain a current file of such as-built documents up-to-date may be just cause to recommend withholding of payments for Work performed. These as-built documents together with all approved samples and a copy of all approved Shop Drawings shall be available to Engineer for reference at the Site. Upon completion of the Work, these as-built documents, samples and Shop Drawings shall be delivered to Engineer for Department. Failure by Contractor to produce acceptable as-built documents of the above listed items shall be cause for reduction of Contract Price in an amount equal to Department's cost of generating or producing the as-built documents.

Health, Safety and Protection:

- 5.20 Contractor shall be responsible for initiating, maintaining and supervising all health and safety precautions and programs in connection with the Work which include but are not limited by the Contract Documents and Contractor's Health and Safety Plan. Contractor shall take all necessary precautions for the health and safety of, and shall provide the necessary protection to prevent damage, injury or loss to all employees and other persons and organizations who may be affected thereby. Contractor shall comply with all applicable Laws of any public body having jurisdiction for the health and safety of persons or property in order to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such health, safety and protection. Contractor shall notify owners of Underground Facilities and utility owners when performance of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. In addition to any requirements imposed by Laws, Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site which are in any way affected by the excavations or other operations connected with performance of the Work under the Contract.
- All damage, injury or loss to any property referred to in the above paragraph caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or caused by anyone for whose acts any of them may be liable, shall be remedied by Contractor; provided that Contractor shall not be responsible for damage or loss attributable to defects in the Drawings or Specifications or to the acts or omissions of Department or Engineer or anyone employed by either of them or anyone for whose acts either of them may be liable, and to the extent not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor. Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a written notice to Department and Contractor in accordance with paragraph 13.11 that the Work is acceptable, except as otherwise expressly provided in connection with Substantial Completion. Department has the right to suspend Work or terminate this contract for cause for Contractor's failure to comply with any health and safety plan required by the Contract Documents or Law.
- 5.22 Contractor shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be Contractor's superintendent unless otherwise designated in writing by Contractor to Department.

Emergencies:

5.23 In emergencies affecting or threatening to affect the safety or protection of persons or the Work or property at the site or adjacent thereto when prompt action is required and there is no reasonable opportunity for prior consultation with Engineer or Department, then Contractor, without special instruction or authorization from Engineer or Department, is obligated to act to prevent or mitigate threatened damage, injury or loss. Contractor shall give Engineer prompt telephonic notice followed by written notice thereof, including any significant changes in the Work or variations from the Contract Documents which Contractor believes have been caused thereby. If Engineer determines that a change in the Contract Documents is required because of the action taken in response to an emergency, an Administrative Agreement, Field Order, Proposed Change Order or Change Order shall be issued to document the consequences of the changes or variations. Contractor shall give Engineer and Department name and number of contact for emergencies during non-Work hours.

Shop Drawings and Samples:

5.24 After checking and verifying all field measurements and after complying with applicable procedures specified in the Contract Documents, Contractor shall submit to Engineer for review and approval in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 1.4, hereof) six copies of all Shop

Drawings plus additional copies as required by Contractor, unless otherwise specified in the Contract Documents. All such Shop Drawings shall bear a stamp or other specific written indication that Contractor has satisfied the requirements of the Contract Documents with respect to the review of the submissions including but not limited to subparagraph 5.25 below. All submissions shall be identified as Engineer may require. The data shown on the Shop Drawings shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable Engineer to review the information as required.

- 5.25 Contractor shall also submit to Engineer for review and approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. Contractor shall check all samples, shall identify them clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended, and shall submit with them a written certification that Contractor has satisfied the requirements of the Contract Documents with respect to the review of such submissions including but not limited to subparagraph 5.25 below.
- 5.26 Before submission of each Shop Drawing or sample, Contractor shall certify that all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto have been reviewed or that each Shop Drawing or sample has been coordinated with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.
- 5. 27 At the time of each such submission, Contractor shall give Engineer specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation of each such variation to be made on each Shop Drawing submitted to Engineer for review and approval.
- 5.28 Engineer will review and approve or disapprove Shop Drawings and samples in 14 days. However, Engineer's review and approval of Shop Drawings will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to the accuracy of other matters that may be contained in the submittals, including but not limited to such matters as dimensions, quantities, performance of equipment and systems proposed by Contractor, Contractor's means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequences, and procedures of construction is indicated in or required by the Contract Documents) or to safety precautions or program incident thereto, the correctness of which shall remain the sole responsibility of Contractor. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 - 5.28.1 When reviewed by Engineer, each submittal of Shop Drawings and samples will be returned to Contractor as either "Approved", "Approved as Noted", "Resubmit with Revisions", or "Disapproved." Submittals stamped as "Approved" or "Approved as Noted" will indicate Engineer's approval thereof, subject to the provisions of paragraph 5.28.
 - 5.28.2 Contractor shall revise and correct Shop Drawings and samples and resubmit them to Engineer for Engineer's second review and return pursuant to paragraph 5.29. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
 - 5.28.3 Costs associated with Engineer's review and return of a Shop Drawing or sample submission other than ones submitted pursuant to paragraph 5.7 of this Section shall be borne by Contractor after the Engineer's second review. Department's charges to Contractor for additional reviews will be equal to Engineer's charges to Department under the terms of Engineer's agreement with Department. In

the event Contractor fails to pay such costs within 30 days after receipt of an invoice from Department, funds will be withheld from payment requests and at the completion of the Work, a Change Order or proposed Change Order will be issued incorporating the unpaid amount, and Department will be entitled to an appropriate decrease in Contract Price.

- 5.28.4 After the Engineer's second review, delays associated with Contractor's resubmittal and Engineer's review and return of a particular Shop Drawing or sample submission shall be the responsibility of Contractor. Such delays shall not justify an increase in Contract Price nor an extension in Contract Time
- 5.29 Engineer's review and approval of Shop Drawings or samples shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has in writing called Engineer's attention to each such variation at the time of submission as required by paragraph 5.27 and Engineer has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample approval; nor will any approval by Engineer relieve Contractor from responsibility for errors or omissions in the Shop Drawings or from responsibility for complying with paragraph 5.26.
- 5.30 Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to Engineer's review and approval of the pertinent submission will be the sole expense and responsibility of Contractor.

Continuing the Work:

5.31 Contractor shall carry on the Work and adhere to the Progress Schedule during all Claims or Disputes with Department. No work shall be delayed or postponed pending resolution of any Claims or Disputes, except as permitted by Article 14 of the General Conditions or as Contractor and Department may otherwise agree in writing.

Weather Protection:

5.32 Contractor shall be responsible for initiating, maintaining and supervising all weather protection precautions and programs in connection with the Work. Additional weather protection provisions, if applicable, are set forth in the Supplementary Conditions, Standard Specifications or Supplementary Specifications.

Cutting and Patching of Work:

- 5.33 Contractor shall be responsible for all cutting of masonry and other materials, and all fitting, drilling or patching which may be necessary to complete the Work or to make its several parts fit together properly, whether or not such Work is expressly specified in the Contract Documents.
- 5.34 Contractor shall not damage or endanger any portion of the Work or the work performed by Department or by any separate contractors by cutting, patching or otherwise altering any work, or by excavation. Contractor shall not cut or otherwise alter work performed by Department or any separate contractors except with the written consent of Department and of such separate contractor. Contractor shall not unreasonably withhold from Department or any separate contractor consent to cutting or otherwise altering the Work.

Quality Control:

5.35 Reference is made to the Supplementary Conditions, Standard Specifications and Supplementary Specifications for the identification of Contractor's quality control system requirements under the Contract.

Project Meetings:

5.36 Contractor, along with appropriate Subcontractors, suppliers and manufacturers, shall attend weekly project meetings at the site or as requested by Department or Engineer, for the purpose of discussing and resolving matters concerning the various elements of the Work.

Notification of Emergency Services:

5.37 Contractor shall notify all local Police, Fire Department and Ambulance Services at least twenty-four (24) hours in advance of construction across or adjacent to existing roadways in order that such services might be aware of any disrupted access.

Conflicts Between Contract Documents and Site:

5.38 Contractor shall notify Engineer and Department immediately upon discovering any conflicts, ambiguities, error or inconsistencies in the Contract Documents, between the Contract Documents and the actual Site Conditions, or between the Contract Documents and work being done by others. Failure to promptly notify the Engineer and Department may invalidate Contractor's request for an increase in Contract Price and/or Time.

ARTICLE 6 - Other Work

Related Work at Site:

- 6.1 Department may perform other work related to the Project at the site by Department's own forces, have other work performed by utility owners, or enter into other contracts for such other work.
- 6.2 Contractor shall afford each utility owner and other contractor who is a party to a direct contract with Department (or Department, if Department is performing the additional work with Department's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect the Work with theirs. Contractor shall do all the Work that may be required to make its several parts come together properly and integrate with other work. Contractor shall only alter the work of others with the written consent of Engineer and notice to the other contractors whose work will be affected, and shall not endanger any work of others by altering their work. The duties and responsibilities of Contractor under this paragraph are for the benefit of such utility owners and other contractors.
- 6.3 If any part of Contractor's Work depends for proper execution or results upon the work of any such other contractor, utility owner or Department, Contractor shall inspect and promptly report to Engineer in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. Contractor's failure so to report shall constitute an acceptance of the other work as fit and proper for integration with Contractor's Work except for latent or non-apparent defects and deficiencies in the other work.

ARTICLE 7 - Department's Responsibilities

- 7.1 Department may issue communications to Contractor through Engineer.
- 7.2 In case of termination of the employment of Engineer, Department shall appoint an engineer whose status under the Contract Documents shall be the same as the former Engineer.
- 7.3 Department shall promptly furnish the data as required under the Contract Documents and shall make payments to Contractor promptly after they are due as provided in Article 13.
- 7.4 Department is represented by the Project Field Representative, the Project Manager and the Designated Representative whose duties and authority are set forth in the Contract Documents. Department is also represented by Engineer.
- 7.5 Department will not be responsible for Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, unless the Contract Documents specifically impose such a duty on Department. Department will not be responsible for Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.
- 7.6 Department will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 8 - Engineer's Duties and Responsibilities

Project Representation:

8.1 The duties and responsibilities and the limitations of authority of Engineer during construction are set forth in the Contract Documents. Engineer's Resident Engineer will assist Engineer in inspecting the performance of the Work. The duties, and authorities of any Resident Engineer and Resident Project Representatives are set forth in the Contract Documents. Secondarily Department is represented as set forth in article 7.4 of the General Conditions.

Visits to Site:

8.2 Engineer shall make any on-site inspections necessary to check the quality or quantity of the Work and to determine if the Work is proceeding in accordance with the Contract Documents. Engineer's duty to visit the site shall in no way be construed to relieve Contractor of its duty to perform the Work in conformance with the Contract Documents.

Clarifications and Interpretations:

8.3 Engineer or Department shall issue with reasonable promptness written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as Engineer or Department may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

Authorized Variations in Work:

8.4 Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and will be binding

on Contractor who shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an increase in Contract Price or an extension in Contract Time, Contractor shall be required to deliver a written notice thereof to Engineer in accordance with the provisions of Article 9 of the General Conditions. If Department and Contractor are unable to agree as to amount and extent thereof, a claim may be made pursuant to Articles 10 and 11 of the General Conditions.

Rejecting Defective Work:

8.5 Engineer, based on its inspections, reports of its Resident Engineer, other information available to it and its professional experience and training, or the direction of Department, may disapprove or reject Work at any time during the construction of the Work, which Engineer believes to be Defective Work. Engineer shall also have authority to require special inspection or testing of the Work as provided in paragraphs 12.4 through 12.10 of the General Conditions, whether or not the Work is fabricated, installed, or completed. When Contractor has been notified by Engineer of disapproval or rejection of Defective Work, Contractor shall take immediate action to correct same at no additional cost.

Shop Drawings, Change Orders and Payments:

- 8.6 Engineer's responsibilities regarding Shop Drawings and samples, are set forth in paragraphs 5.24 through 5.30 of the General Conditions. If Contractor believes that Engineer's approval of a Shop Drawing or sample justifies an increase in Contract Price or an extension in Contract Time, Contractor shall be required to deliver a written notice thereof to Engineer in accordance with the provisions of Article 9 of the General Conditions. If Department and Contractor are unable to agree as to amount and extent thereof, a claim may be made pursuant to Articles 10 and 11 of the General Conditions.
- 8.7 Engineer's duties regarding Change Orders are set forth in Articles 9, 10 and 11 of the General Conditions.
- 8.8 Engineer's duties regarding Applications for Payment, etc., are set forth in Article 13 of the General Conditions.

Determinations for Unit Prices:

8.9 Engineer will review and make preliminary determinations on the actual quantities and classifications of acceptable Unit Price Work performed by Contractor. Engineer will review such preliminary determinations with Contractor, before rendering a written decision thereon by recommendation of an Application for Payment or otherwise. Department shall review and approve Engineer's determinations. Department's decisions thereon shall be final unless within 10 days after the date of any such decision, Contractor delivers to Department and to Engineer written notice of disagreement with Engineer's Determination including written documentation supporting such position.

Engineer's Determinations and Claims:

8.10 Engineer shall interpret the Contract Documents and determine the acceptability of the Work thereunder subject to Department's right to modify or overrule Engineer's determination after consultation with Engineer and Contractor. Claims or other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work, or in respect to changes in the Contract Price or Contract Time will be referred to Engineer in writing with a request for a formal determination in accordance with this paragraph. Engineer shall render such determination in writing within a reasonable time. Written notice of Contractor's disagreement with Engineer's Determination constituting a Claim shall be delivered by Contractor to Engineer and Department

- within ten days after receipt. Written documentation supporting such position shall be submitted to Department within thirty days of-Engineer's Determination, unless the Department allows an extension of time to submit additional information.
- 8.10.1 A written demand or written assertion by Contractor seeking the payment of money is not a Claim under this Article until certified as required below. Contractor shall submit with the claim a certification executed by Contractor's Authorized Representative specified in the Contract Documents that:
 - 8.10.1.1 The Claim is made in good faith,
 - 8.10.1.2 Supporting Cost and Pricing Data are current, accurate, and complete to the best of the Contractor's knowledge and belief, and
 - 8.10.1.3 The amount of the Claim accurately reflects the adjustments in Contract Price or Contract Time for which Contractor believes Department is liable.
- 8.10.2 Contractor agrees that all unresolved claims shall be subject to the Dispute Resolution procedures as provided in Article 9 in Appendix B to the Agreement.
- 8.10.3 Contractor shall proceed diligently with performance of Work under this Contract, and comply with any decision of Engineer or Department pending final resolution of any request for relief, Claim, appeal, or action arising under the Contract.

Limitations on Engineer's Responsibilities:

- Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "unreasonable," "unsuitable," "acceptable," "proper," or "satisfactory," or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of Engineer as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents unless there is a specific statement indicating otherwise. The use of any such term or adjective shall not be effective to assign to Engineer any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 8.12 or 8.13.
- 8.12 Engineer will not be responsible and Contractor remains responsible for Contractor's means, methods, techniques, sequences and procedures of construction, and the safety precautions and programs incident thereto, unless Contract Documents specifically impose such a duty on Engineer. Engineer will not be responsible for Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.
- 8.13 Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 9 - Changes in the Work

9.1 Department may, at any time or from time to time and without notice to any surety, order additions, deletions or revisions in the Work or other requirements, which the performance of, or compliance with, is established in the provisions of the Contract Documents. These changes will be initiated by Proposed Change Orders, in Administrative Orders and authorized by Change Orders. Upon receipt of an Administrative Order, or

Proposed Change Order, the Contractor shall proceed with the Work involved. All such Work involved shall be performed in accordance with the applicable conditions of the Contract Documents. If an Administrative Order or Proposed Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made in a duly executed Change Order. The value of any work covered by a Proposed Change Order or a Change Order for an increase or decrease in the Contract Price or the Contract Time, hereafter called the "Work involved", shall be determined by one of the following methods:

- 9.2 Department may order minor changes in the Work which do not involve an adjustment in the Contract Price or in the Contract Time and are consistent with the overall intent and purpose of the Contract Documents. Such minor changes will be authorized by a Field Order which shall be binding on Department and Contractor who shall perform such changes promptly. If Contractor believes that a Field Order justifies an increase in the Contract Price or the Contract Time, Contractor shall make written notification in accordance with Section VIII, Article 8.10 within 3 days and provide documentation within 15 days in a Proposed Change Order to Engineer.
- 9.3 Additional work performed without authorization of a Proposed Change Order will not entitle Contractor to an increase in the Contract Price or an extension in the Contract Time, except in the case of emergency work as provided in paragraph 5.23 of the General Conditions and except in the case of uncovering Work as provided in paragraph 12.9 and 12.10 of the General Conditions.
- 9.4 When changes in the Work, involving adjustments to the Contract Price or Contract Time are contemplated by Department, pursuant to paragraph 9.1, Contractor may be requested to submit a cost proposal prior to being authorized to proceed with the change. If Department and Contractor are unable to agree and Department orders the change, or if Department pursuant to Engineer's review and decision concludes that the written direction, instruction, interpretation or clarification, approval, decision or determination does not require an increase in Contract Price or extension in Contract Time, Contractor will be required to carry on with the Work involved and adhere to the Progress Schedule. Contractor proposals substantiating the amount and extent of any proposed adjustment in Contract Price or Contract Time shall become due within three days of receipt (or issuance) of a Proposed Change Order initiated by Department (or Contractor), and shall be submitted in accordance with Articles 8, 9, 10 and 11 of the General Conditions. Any delays in the submittal of Contractor proposals relative to adjustments in Contract Price or Contract Time will not justify a delay or constitute basis for an increase in Contract Price or an extension in Contract Time. Unless Contractor gives written notice of intent to appeal Department's determination or to file a claim in accordance with Article 8 of the General Conditions, within said thirty days of the issuance of a Proposed Change Order or the rejection of a Proposed Change Order, Department's determination shall be final and binding upon Contractor.
- 9.5 Upon receipt of a cost proposal from Contractor, pursuant to paragraph 9.4 above, and if Department agrees with the increase or decrease in the Contract Price or Contract Time, Department shall authorize the change in the Work by issuing a Proposed Change Order and shall begin preparation of a Change Order covering the Work involved.
 - 9.5.1 A Change Order shall also be any other written order, including direction, instruction, interpretation, determination, or decision embodied in a Field Order, or in a response to a request for clarification or interpretation of the requirements of the Contract Documents, or in an approval of a Shop Drawing or sample, or in a decision relating to a report or differing or unforeseen conditions or the acceptability of Work or Admistrative Order which causes any change, provided that Contractor gives Engineer and Department a dated written notice identifying the written order and stating circumstances and other information required in this Article and in Articles 8, 9, 10 and

- 11 of the General Conditions indicating that Contractor considers the written order a Proposed Change Order.
- 9.5.2 Contractor quotations substantiating the amount or extent of any proposed adjustment in Contract Price or Contract Time shall cover all known amounts or extents to which Contractor is entitled as a result of the proposed change. Pursuant to this requirement of the Contract Documents, Contractor acknowledges and agrees to the following waivers when executing Change Orders or Proposed Change Orders authorized in accordance with paragraph 9.4 of the General Conditions:
 - 9.5.2.1 Contractor acknowledges and agrees that the adjustments in Contract Price and Contract Time stipulated in this Change Order represent full compensation for all increases or decreases in the cost of, or the time required to perform the entire Work under the Contract, arising directly or indirectly from this Change Order, including this and all previous Change Orders. Acceptance of this waiver constitutes an agreement between Department and Contractor that the Change Order represents an all inclusive, mutually agreed upon adjustment to the Contract for all direct, indirect and consequential costs and delays, and that Contractor shall waive all rights to file a claim on this Proposed Change Order after it is properly executed.
 - 9.5.2.2 Acceptance by Contractor is evidence of mutual accord and satisfaction for those adjustments in Contract Price and Contract Time stipulated in this Proposed Change Order, that Contractor shall submit detailed supporting data within fifteen days in accordance with Articles 10 and 11 of the General Conditions to allow negotiation of outstanding issues, and that the changes ordered and documented by this Proposed Change Order will be incorporated into a future Change Order subsequent to agreement on all outstanding issues.
- 9.6 If the provision of any bond requires that the surety be notified of any change in the Work, it shall be Contractor's responsibility to so notify the surety and the amount of each applicable bond shall be adjusted accordingly. Contractor shall furnish proof to Department of such adjustment.
- 9.7 No claim by Contractor for an adjustment under this Article of the General Conditions shall be allowed if asserted after the date of final payment under this Contract.

ARTICLE 10 - Change of Contract Price or Time

- 10.1 The Contract Price constitutes the total compensation, subject to authorized adjustments, payable to Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at its own expense without any change in the Contract Price or the Contract Time.
- 10.2 The Contract Price and the Contract Time may only be changed by a duly executed Change Order.
- 10.3 The value of the Work involved shall be determined by one of the following methods:
 - Where the Work involved is covered by unit prices contained in the Contract Documents, those unit prices shall be used to determine the cost of the Work involved.
 - Where the Work involved is not covered by unit prices contained in the Contract Documents, by application of mutually agreed upon unit prices to the quantities of the items of Work involved.

- 10.3.3 By mutual acceptance of a lump sum.
- 10.3.4 On the basis of the cost of the Work involved as provided in paragraph 10.4 of this Article plus a Contractor's fee for overhead and profit as provided in paragraph 10.7 of this Article.
- 10.3.5 Where the Department and Contractor cannot agree on any of the methods described above, and Department directs Contractor to proceed with the Work involved as provided in Article 10 of the General Conditions.
- 10.4 The Cost of the Work involved shall include the following items and shall not include any of the costs disallowed under this Article 10 of the General Conditions:
 - 10.4.1 Payroll costs of employees in the direct employ of the Contractor in the performance of the Work involved in job classifications agreed upon by Department and Contractor. Payroll costs shall include, but shall not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers or workmen's compensation, health and retirement benefits, and sick leave applicable thereto. Such employees may include foremen at the site but shall not include employees in the job classifications itemized in paragraphs 10.6.1. The costs of performing the Work involved during other than normal working hours, as defined in paragraph 5.3.1, shall be included in the above to the extent authorized by Department and as required by Law.
 - 10.4.2 Cost of all materials and equipment furnished and incorporated into the Work involved, including costs of transportation and storage thereof, and suppliers' field services connected therewith. All cash discounts shall accrue to Contractor unless Department deposits funds with Contractor with which to make payments, in which case, the cash discounts shall accrue to Department. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to Department, and Contractor shall make provisions so that they may be obtained.
 - 10.4.3 Payments made by Contractor to subcontractors who perform a part of the Work involved. If required by Department, Contractor shall obtain competitive bids from prospective subcontractors acceptable to Contractor and shall deliver such bids to Department who will then determine which bids will be accepted. If a subcontract provides that the subcontractor is to be paid on the basis of cost plus a fee, the subcontractor's cost shall be determined in the same manner as Contractor's cost of the Work involved. All subcontracts shall be subject to the provisions of the Contract Documents, insofar as applicable.
 - 10.4.4 Costs of special consultants, including but not limited to engineers, architects, testing laboratories, surveyors, attorneys and accountants, employed for services specifically related to the Work involved to the extent authorized in writing by Department.
 - 10.4.5 Costs of Contractor owned equipment Contractor shall be reimbursed for his ownership and operating costs for self owned equipment employed on the Work involved. The rates of reimbursement shall be as listed in most recent published edition of the Rental Rate Blue Book published by Dataquest, Inc. in effect on the date of issuance of the applicable Change Order or Proposed Change Order, or prior to performing the Work in a claim for an increase or decrease in the Contract Price and applied in the following manner.
 - 10.4.5.1 Ownership costs The equipment rates for ownership costs include depreciation on the original purchase, insurance, applicable taxes, interest on investment, storage, repairs,

- mobilization to and demobilization from the site of the Work involved, and profit reimbursement will be made for the hours on the Work involved. In no event shall the equipment rate billed to Department be at rates exceeding those described below.
- 10.4.5.2 Less than 8 hours of actual use or necessary for availability as approved by Engineer: The daily rate or the product of the hours of actual use multiplied by the hourly rate, whichever is less.
- 10.4.5.3 Between 8 hours and 40 hours of actual use: The weekly rate or the product of the hours of actual use used divided by 8 and multiplied by the daily rate, whichever is less.
- 10.4.5.4 Between 40 hours and 176 hours of actual use: The monthly rate or the product of the hours of actual use divided by 40 multiplied by the weekly rate, whichever is less.
- 10.4.5.5 Over 176 hours of actual use: The product of the hours of actual use divided by 176 multiplied by the monthly rate.
- 10.4.5.6 Operating costs including fuel, lubricants, other operating expendables, and preventive and field maintenance. Operating costs do not include the operator's wages. Contractor shall be reimbursed the product of the hours of actual use multiplied by the estimated operating cost per hour.
- 10.4.5.7 The geographic area adjustment factor and the Rate adjustment tables for federal aid projects shall be applied to the equipment ownership rates.
- 10.4.5.8 The rates used shall be those in effect at the time the Work involved is to be done as listed in the then current Rental Rate Blue Book.
- 10.4.5.9 In the event that a rate is not established in the Rental Rate Blue Book for a particular piece of equipment, Department will establish rates for ownership and operating costs.
- 10.4.5.10 Equipment to be used by Contractor shall be specifically described by manufacturer and model number and be of suitable size and capacity to accomplish the Work involved. In the event Contractor elects to use equipment of a higher rental rate than equipment suitable for the Work involved, payment will be made at the rate applicable to the suitable equipment. Department and Engineer shall determine the suitability of the equipment. If there is a differential in the rate of pay of the operator of oversized or higher rate equipment, the rate paid for the operator will likewise be related to the suitable equipment.
- 10.4.5.11 Transportation, loading and unloading, installation, dismantling and removal costs shall be included only if such construction equipment and machinery is imported to the site solely to perform the Work involved in the Change Order Proposed Change Order, or Claim. All equipment costs shall cease when the use thereof is no longer necessary to perform the Work involved or the equipment cannot be used to perform the Work involved due to contractor actions or inactions. Payroll costs for employees operating the equipment shall be in accordance with paragraph 10.4.1 of the General Conditions.

- 10.4.5.12 Actual equipment use time documented by Engineer shall be on the basis that the equipment was on and used at the site. In addition to the leasing rate, equipment operational costs shall not exceed the estimated hourly operation rate as set forth in the Blue Book. Daily records listing the equipment units and their respective operators, identification code, and actual usage and certified at the end of each day by Engineer shall be the record upon which actual equipment use shall be based. For multiple shift work sequences the allowable equipment rate for second or third shifts shall not exceed 50 percent of the base rate. Idle equipment at the site and necessary to perform the Work involved but not in actual use shall be paid at the rate determined above. Idle time shall include a reasonable time allowance to and from the site, and be as documented by Engineer.
- 10.4.6 Costs of Contractor rented equipment.
 - 10.4.6.1 In the event Contractor must rent a specific piece of equipment, payment will be the actual rental rate for the piece of equipment for the time that is is used on the Work involved or required by Department to be present, not to exceed the rental rate in the Rental Rate Blue Book, plus the reasonable cost of moving the equipment onto and away from the site of the Work involved.
 - 10.4.6.2 Contractor shall also be reimbursed for the operating cost of the rented equipment if that cost is not included in the rental cost. The operating cost shall be determined in the same manner as specified for Contractor owned equipment above. If contractor owned equipment is available on site to complete the work, Contractor shall be reimbursed only at the rate for owned equipment and there shall not be any reimbursement for transportation of equipment to or from site.
 - 10.4.6.3 In the event area practice dictates the rental of fully manned or fueled and maintained equipment, payment will be made on the basis of an invoice for the rental of the fully manned, fueled and/or maintained equipment, including all costs incidental to its use, plus costs of moving to and from the site of the Work involved, provided the rate is substantiated by area practice.
 - 10.4.6.4 Transportation, loading and unloading, installation, dismantling and removal costs shall be included only if such construction equipment and machinery is imported to the site solely to perform the Work involved in the Change Order, Proposed Change Order, or Claim. All equipment costs shall cease when the use thereof is no longer necessary to perform the Work involved or the equipment cannot be used to perform the Work involved due to Contractor actions or inactions. Payroll costs for employees operating the equipment shall be in accordance with paragraph 10.4.1 of the General Conditions.
- 10.4.7 The maximum amount of reimbursement for the ownership costs of Contractor owned equipment or for the rental costs of rented equipment shall be limited to the original purchase price of the equipment as listed in the Green Guide for Construction Equipment published by the Equipment Guide Book Company. In the specific event where the reimbursement is limited by the original purchase price, Contractor shall be reimbursed for the operating cost per hour for each hour of actual use.
- 10.4.8 Supplemental costs due solely in connection with the Work involved to include the following:

- 10.4.8.1 The necessary transportation, travel and subsistence expenses of Contractor's employees who are solely employed in the Work involved.
- 10.4.8.2 Costs, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site required, but excluding hand tools, protective clothing and other consumables which are used or consumed in connection with the Work involved and are individually valued at less than \$100.00.
- 10.4.8.3 Sales, consumer use, or similar taxes for which Contractor is liable, exclusive of New York State and local sales taxes for materials, supplies and equipment incorporated into the Work.
- 10.4.8.4 Royalty payments and fees for licenses and permits.
- 10.4.8.5 Costs of utilities at the site including but not limited to electricity, telephone, fuel, heat, water, property rental and sanitary facilities.
- The amount of credit to be allowed by Contractor to Department for any individual change in the Work which results in a net decrease in cost shall be the amount of the actual net decrease plus a deduction in Contractor's fee equal to one half of the fee derived from the application of paragraphs 10.7.2.1, 10.7.2.2 and 10.7.2.3 of this Article.
 - 10.5.1 When more than one individual change is covered by one Proposed Change Order or Change Order, the adjustment in Contractor's fee shall be the sum of the individual fees computed on each individual change in accordance with paragraphs 10.7.2.1 through 10.7.2.4.
- 10.6 The cost of the Work involved shall not include any of the following, all of which are to be considered general and overhead costs covered by the Contractor's fee:
 - 10.6.1 Payroll costs and other compensation of Contractor's executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, superintendents, administrators, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by Contractor, at the site or not, for general administration of the Work including any Change Orders, and who are not specifically included in the agreed upon schedule of job classifications referred to in paragraph 10.4.1 of this Article.
 - 10.6.2 Expenses of Contractor's principal and branch offices other than Contractor's office at the site. Costs derived from the computation of an extended or unabsorbed home office overhead rate by application of the Eichleay, Allegheny, Burden Fluctuation, or other similar methods.
 - 10.6.3 Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work involved and charges against Contractor for delinquent payments.
 - 10.6.4 Cost of premiums for all bonds and insurance whether or not Contractor is required by the Contract Documents to purchase and maintain the same.
 - 10.6.5 Costs incurred in the preparation of Proposed Change Orders or Change Orders or in preparation or filing of claims.

- 10.6.6 Expenses of Contractor associated with anticipated lost profits or lost revenues, lost income or earnings, lost interest on earnings or unpaid retainage.
- 10.6.7 Small tools used or consumed in the performance of the Work involved having an individual value of less than \$100.
- 10.6.8 Costs due to negligence of Contractor or any subcontractor anyone directly or indirectly employed by them for whose acts any of them may be liable, including, but not limited to correction of defective work, disposal of equipment or material wrongly supplied and repairing any damage to property.
- 10.6.9 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.4 of this Article, all of which are to be considered general and overhead costs covered by the Contractor's fee.

Contractor's Fee:

- 10.7 The Contractor's fee for general and administrative overhead costs (whether at the site or in Contractor's principal or branch offices), small tools and profit on the Work involved shall be determined by negotiations in accordance with this paragraph.
 - 10.7.1 Contractor shall negotiate with Department for reasonable overhead rates and fair and reasonable profit based on assumptions of risk, exposure to weather, size of the change, labor to material ratio, equipment requirements, and time of performance.
 - 10.7.2 In no case shall the Contractor's fee exceed the following percentages of the various percentages of the Cost of the Work involved.
 - 10.7.2.1 For costs incurred under paragraph 10.4.1 (Payroll Costs) of this Article, the Contractor's fee shall not exceed fifteen percent (15%).
 - 10.7.2.2 For costs incurred under paragraph 10.4.2 (Costs of Materials and Equipment) of this Article, the Contractor's fee shall not exceed ten percent (10%).
 - For costs incurred under paragraph 10.4.3 (Cost of Subcontracts) of this Article, the Contractor's fee shall not exceed five percent (5%) and the subcontractor's fee shall not exceed ten percent (10%).
 - 10.7.2.4 For costs incurred under paragraph 10.4.3 of this Article, for work performed by a subcontractor's subcontractor, the Contractor's and the first subcontractor's fees shall not exceed five percent (5%) each and the second subcontractor's fee shall not exceed ten percent (10%).
 - 10.7.2.5 No fee shall be paid on the costs itemized under paragraphs 10.4.4 and 10.4.5 nor on subcontractors' fees derived in accordance with paragraphs 10.7.2.3 and 10.7.2.4.
 - 10.7.3 No fee shall be paid on premium portion of wages nor on increased wages due to delays.
- 10.8 Changes in the Contract Price due to changes in the Contract Time.

- 10.8.1 An increase in the Contract Price due solely to delays causing extensions in the Contract Time will be allowed only if the delays to the Work, or parts thereof, arise from acts or omissions of Department or Engineer which are longer than the time period(s) provided for review(s) or decision(s) as provided for in the Contract Documents, and provided further that the delays arise from changes in the Work covered by Proposed Change Orders or Change Orders prepared pursuant to Article 9 of the General Conditions or from suspensions of Work pursuant to paragraph 14.1 of the General Conditions. However no adjustment in the Contract Price shall be made under this paragraph for the following reasons:
 - 10.8.1.1 For any extensions granted in the Contract Time to the extent that performance would have been so extended by any other cause including fault or negligence of Contractor or subcontractors, suppliers or other persons or organizations.
 - 10.8.1.2 For any acceleration alternative in lieu of an extension proposed by Contractor, to the extent that the acceleration costs exceed those in connection with the alternative extension in Contract Time.
 - 10.8.1.3 For which a Contract Price is provided or excluded under any other provision of the Contract Documents.
 - 10.8.1.4 For delays which are covered by or which could be covered by relocating the Total Float or a portion of it.
- 10.8.2 Recovery of damages for delay on account of extensions in Contractor's Progress Schedule or in connection with acceleration alternatives thereof will be allowed only when said delays extend the Work, or a part thereof, beyond the applicable Contract Time(s).
- 10.8.3 It is further expressly agreed and understood that Contractor will not be entitled to any compensation or damages on account of delays which meet the requirements of paragraph 10.12.3 of the General Conditions for time extensions but which can or could have been avoided by reallocating portions of the Total Float. Under this requirement, it is further understood and agreed that the only remedies for delays which are figured to cause an extension in the Contract Time or form the basis for a proposal for an acceleration alternative thereof solely due to the use of Total Float will consist of an increase in Contract Time only and shall exclude Contractor's right to recover any delay damages or compensation from Department.
- In submitting proposals or asserting claims for changes under this Article, Contractor acknowledges and agrees that no adjustment shall be made: 1) for any escalation costs for any part of the Work which is not delayed beyond the applicable latest possible dates specified in the approved Progress Schedule, or 2) for any acceleration costs incurred without prior authorization from Department, or 3) for which an adjustment has been provided for, limited as to extent, or excluded under any other provision of the Contract Documents.
- 10.10 Contractor quotations substantiating the amount or extent of any proposed adjustment in Contract Price or Contract Time shall cover all known amounts or extents (direct, indirect and overhead) to which Contractor is entitled as a result of the proposed change. Pursuant to this requirement, Contractor acknowledges and agrees to the following waivers when executing Proposed Change Orders and Change Orders authorized in accordance with Article 9:

- 10.10.1 Contractor acknowledges and agrees that the adjustments in Contract Price and Contract Time stipulated in the Change Order represent full compensation for all increases or decreases in the cost of, or the time required to perform, the entire Work under the Contract arising directly or indirectly from the Change Order. Acceptance of this waiver constitutes an agreement between Contractor and Department that the Change Order represents an all inclusive, mutually agreed upon, adjustment to the Contract for all direct, indirect and consequential costs and delays, and that Contractor will waive all rights to file a claim on the Change Order after it is duly executed.
- 10.10.2 Acceptance by Contractor is evidence of mutual accord and satisfaction for those adjustments in the Contract Price and Contract Time stipulated in the Proposed Change Order, that Contractor will submit detailed supporting data within fifteen days in accordance with Articles 10 and 11 of the General Conditions to allow negotiation of outstanding issues, and that the changes ordered and documented by the Proposed Change Order will be incorporated into a future Change Order subsequent to agreement on all outstanding issues.
- 10.11 Additional costs incurred due to acceleration or additional work performed by Contractor without an agreed upon Proposed Change Order will not entitle Contractor to an increase in Contract Price or Contract Time, except in the case of emergency work as provided in paragraph 5.23 of the General Conditions or in the case of uncovering Work as provided in paragraph 12.9 of the General Conditions.
- 10.12 The Contract Time may be changed only by a duly executed Change order. Any proposal for an extension or shortening of the Contract Time shall be based on a Proposed Change Order in accordance with the provisions of this Article.
 - 10.12.1 Contractor requests substantiating the extent of increase in the Contract Time shall be delivered to Engineer within fifteen days of the event causing the proposed need for the extension in the Contract Time unless Department, in writing, allows an additional period of time. Contractor shall prove that the delays have materialized or will materialize despite reasonable, prudent, and diligent efforts to prevent such delays and meet the criteria set forth in this Article. Any delays by Contractor in submittal of proposals will not justify a delay or be basis for an extension of the Contract Time.
 - 10.12.2 Extensions in Contract Time due to delays to parts of the Work will not be granted until all Total Float available for those parts of the Work has been used.
 - 10.12.3 An extension in the Contract Time will not be granted unless Contractor can demonstrate, through an analysis of the Progress Schedule approved in accordance with the applicable provisions of the Standard Specifications, that the delay in completing the applicable parts of the Work within the applicable Contract Time(s) arises from unforeseeable causes beyond the control and without the fault or negligence of Contractor or its Subcontractors, Suppliers or other persons or organizations, and which Contractor could not have guarded against, and that such causes do or will cause extension of the schedule for that part of the Work beyond the applicable Contract Time. Examples of such causes include 1) acts of God or of the public enemy, 2) fires, floods, epidemics, quarantine restrictions, 3) strikes, freight embargoes, 4) unusually severe weather, 5) delays of Subcontractors or Suppliers at any tier arising from unforeseeable causes beyond the control and without fault or negligence of both Contractor and the Subcontractors, Suppliers or other persons organizations.
 - 10.12.4 All time limits stated in the Contract Documents are of the essence. They have been developed by taking into account:

- 10.12.4.1 The scope of the Work under the Contract Documents;
- 10.12.4.2 Reasonable time for performance of the Work, or parts thereof, as a whole; and
- 10.12.4.3 The perceived sensitivity of the Work, or parts thereof, as a whole, to the potential delaying effect of causes meeting the requirements of paragraph 10.12.3.
- 10.12.4.4 Therefore, and as long as delays meeting the requirements of paragraph 10.12.3 are not to be considered by Contractor in the initial development of the Progress Schedule pursuant to paragraph 1.6 of the General Conditions and the Progress Schedule Section of the Standard Specifications, the initial Progress Schedule developed by Contractor could show Total Float with respect to the Contract Time, or contract Times. Pursuant to the Float sharing requirements of the Contract Documents (as set forth in the provisions of Progress Schedule Section of the Standard Specifications) any such Total Float materializing between Contractor's completion of the Work, or part thereof, as anticipated by Contractor's approved progress Schedule, and the corresponding Contract Time(s) will be available to Department, Engineer, Contractor and others to absorb delays that cannot be mitigated by any other means.
- 10.12.5 The provisions of Section 10.11 of this Article shall govern and be applicable to the following:
 - 10.12.5.1 Changes in Contract Time initiated by Department or Contractor due to delays which meet the requirements of paragraph 10.12.4.
 - 10.12.5.2 Contractor proposals to accelerate the Progress Schedule, in lieu of the alternate extension of Contract Time, due to delays meeting the requirements of paragraph 10.12.3.
- 10.12.6 The provisions of paragraphs 10.11, 10.12.2, and 10.12.3 shall exclude recovery for damages arising out of an acceleration alternative to an extension in Contract Time on account of delays not meeting the requirements for extensions in Contract Time set forth in this Article.
- 10.12.7 The provisions of this Article 10 shall not exclude recovery for damages (including compensation for additional professional services and court costs) for delay by either party, except as otherwise specifically disallowed in this Article and in other provisions of the Contract Documents.
- 10.13 Failure, refusal or neglect by Contractor to comply with the time requirements for delivery of written Proposed Change Orders or notice of a claim shall be considered to be a waiver by Contractor of any request or claiming for extension in Contract Time.
 - 10.13.1 Contractor proposals (or claims) substantiating Contractor's proposed adjustment in Contract Price shall be delivered within the time period stipulated in paragraph 9.3 and 9.4, unless Department in writing, allows an additional period of time to ascertain accurate cost data. Contractor shall prove that additional costs were necessarily incurred, despite Contractor's reasonable, prudent, and diligent efforts to prevent such costs and which meet the criteria set forth in this Article. Any delays in the submittal of Contractor proposals relative to adjustments in Contract Price will not justify a delay or constitute basis for an increase in Contract Price or an extension in Contract Time.

10.13.2 Contractor proposals (or claims) shall be submitted on forms required by Contract Documents, and shall remain firm for a period of at least 60 days from delivery of the proposal (or claim). Proposals (or claims) shall include itemized estimates of all costs and schedule adjustments that will result directly or indirectly from the changes described. Unless otherwise specified, itemized estimates shall be in accordance with the requirements of this Article of the General Conditions and in sufficient detail to reasonably permit an analysis by Engineer and Department of all quantities involved, labor and payroll costs, productivity rates, material costs, Subcontractor and Supplier costs, supplemental costs as described in paragraph 10.4.8, special consultant costs as described in paragraph 10.4.4, equipment costs, general and administrative overhead costs, field office overhead costs, and profit and shall cover all aspects of the Work involved in the change, whether such was deleted, added, changed, or impacted. Any amount claimed for Subcontractors, Suppliers or other persons or organizations shall be similarly supported. Itemized schedule adjustments shall be sufficiently detailed to permit an analysis of effects on the Progress Schedule as required in the Standard Specifications.

ARTICLE 11 - Unit Price Work and Cash Allowances

Cash Allowances:

- 11.1 Contractor shall include in the Contract Price all cash allowances named in the Contract Documents and all Work covered by those cash allowances shall be performed for an amount not to exceed those allowances without prior approval in writing by Engineer.
 - 11.1.1 The allowances include the cost to Contractor (less any applicable trade discounts) of materials labor and equipment required by the allowances to be delivered at the site, and all applicable taxes; and the cost documentation requirements of Articles 9, 10, 11 apply to cash allowances.
 - 11.1.2 Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

Unit Price Work:

- Where the Contract Documents provide that all or part of the Work to be performed on the basis of Unit Prices, the following shall apply:
 - 11.2.1 The original Contract Price shall include the sum of the bid unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated on the Contract Bid Form.
 - 11.2.2 Unless otherwise provided by the Contract Documents, the estimated quantities of Unit Price Work are not guaranteed and are solely for the purpose of comparing Bids and determining the initial Contract Price.
 - 11.2.3 Engineer shall determine the actual quantities and classifications of Unit Price Work performed by Contractor and will review with Contractor preliminary determinations before recommending an Application for Payment for those items.

- 11.2.4 Contractor shall have included overhead and profit in the price of each separately stated unit price item bid.
- 11.2.5 The Unit price of an item of Unit Price Work shall be subject to re-evaluation, negotiation, and possible adjustment under the following conditions:
 - 11.2.5.1 If the total cost of a particular item of Unit Price Work change by \$30,000 or 5% or more of the total Contract Price, whichever is less, and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than 15% from the estimated quantity of such item indicated in the Agreement; and
 - 11.2.5.2 If Contractor justifies and adequately documents to the Department's satisfaction additional expenses have been incurred as a result thereof, or
 - 11.2.5.3 If Department believes that the quantity variation entitles Department to an adjustment in the Unit Price,

Either Department or Contractor may make a request for an adjustment in the Contract Price in accordance with the Contract Documents. If the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed, a claim may be made.

- 11.2.6 The negotiated Unit Price shall be applicable only to the variation in quantities above 115% or below 85% of the quantities estimated or indicated.
- 11.2.7 If Department or Contractor believes that the quantity variation requires an extension or shortening in Contract Time, either party shall within seven working days of knowledge of the variation in quantities, submit a written Proposed Change Order to the other party and to Engineer, and substantiate the request within fifteen days thereafter in accordance with the analysis and documentation provisions of the Standard and Supplementary Specifications.

ARTICLE 12 - Warranty and Guarantee; Tests and Inspections; Correction, Removal or Acceptance of Defective Work

Warranty and Guarantee:

- 12.1 Contractor warrants and guarantees to Department that all Work shall be in accordance with the Contract Documents and shall not be defective. Immediate notice of all defects shall be given to Contractor by Engineer. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article.
 - 12.1.1 The obligations of Contractor under this paragraph 12.1 shall be in addition to and not in limitation of any obligation imposed upon it by special guarantees required by the Contract Documents or by Law.
 - 12.1.2 Notwithstanding anything in these Contract Documents to the contrary, when a particular item of equipment or part of the Work reaches Substantial Completion upon successful performance of Pre-operational Testing, and a) is not placed in continuous service until the commencement of the Correction Period, or b) is placed in continuous service upon reaching Substantial Completion (as a segment of a completed Project) but use will be limited until all segments of the Project reach substantial completion thereby commencing the Correction Period, and notwithstanding anything in the Contract Documents to the contrary, Contractor shall maintain the particular item of

equipment or part of the Work in good order and in proper working condition during the period between the particular Substantial Completion date and the commencement of the Correction Period, and for such maintenance Contractor shall receive no adjustment in Contract Price. Also Contractor shall maintain the warrantees and guarantees required under paragraph 12.1 of the General Conditions in full force and effect during the period between the particular item's Substantial Completion date and the commencement of the Correction Period, and for such warranties and guarantees Contractor shall receive no adjustment in Contract Price.

12.1.3 The warrantees and guarantees provided by Contractor under paragraph 12.1 of the General Conditions shall remain in full force and effect from the date of Substantial Completion of the Work, or part thereof, until one year after the date of commencement of the Correction Period or such a longer period as may be prescribed by Law or the terms of any applicable specific warranty or guarantee required by the Contract Documents or by any specific provision of the Contract Documents.

One Year Correction Period:

- 12.2 If within the period from the date of Substantial Completion of a particular item of equipment or a designated part of the Work to one year after the commencement of the Correction Period, or such longer period as may be prescribed by Federal or New York State Law or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, the particular item of equipment or designated part of the Work is found to be defective, Contractor shall promptly, without an adjustment in Contract Price and in accordance with Department's or Engineer's written instructions, either correct such Defective Work, or if it has been rejected by Department or Engineer, remove it from the site and replace it with Work which conforms to the requirements of the Contract Documents. Department or Engineer may direct the correction or removal and replacement of Defective or rejected Work. In addition to any other remedies which Department may have, Contractor shall pay the indirect and consequential costs of such correction or removal and replacement, including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by Department due to delays to others performing work under a separate contract with Department, and other contractual obligations, if the Defective Work is not corrected or the rejected Work is not removed and replaced within 30 days of the Department's or Engineer's written rejection or request for rejection of Work unless otherwise provided for in writing. In the event that Contractor fails to pay such costs within thirty days after receipt of an invoice from Department, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount, and Department shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, a claim may be made therefore as provided in Articles 8, 9 and 10 of the General Conditions.
 - 12.2.1 At the date of Substantial Completion of the Work, the parties have agreed on the date for commencement of the Correction Period. However, Department may at its sole option advance or delay the date for commencement of the Correction Period, and Contractor's obligations to extend warranties and guarantees in accordance with paragraphs 12.1.2 and 12.1.3 or to maintain the Work in accordance with paragraph 12.1.2 and 12.1.3 until then shall remain absolute. Applicable Change Orders or Proposed Change Orders shall be executed by the parties to adjust the Contract Price, as appropriate, on the basis of the unit prices declared in Contractor's Bid for extended warranty and extended maintenance requirements.
 - 12.2.2 No later than 30 days before the date for commencement of the Correction Period, Engineer shall notify Contractor in writing of the date upon which the Correction Period is expected to commence, and Contractor shall ensure that the parts of the Work which reached Substantial Completion upon

successful performance of Pre-operational Testing but were not placed in continuous service, are ready in their entirety by such date for use by Department as contemplated in the Contract Documents. In addition to any other damages payable by Contractor under these Contract Documents, Contractor shall also be liable for any damages suffered by Department on account of the parts of the Work which reached Substantial Completion upon successful performance of Pre-operational Testing but were not placed in continuous service at the beginning of the Correction Period because they were not ready for continuous utilization for the purposes for which they are intended.

- 12.2.3 Each month during the period between the date of Substantial Completion of parts of the Work which reached Substantial Completion upon successful performance of Pre-operational Testing and the date of commencement of the Correction Period, Contractor shall certify to Engineer in writing that the said parts of the Work are being properly maintained and will be ready for use by Department upon commencement of the Correction Period.
- 12.2.4 During the period described in Section 12.2.3 until commencement of the Correction Period, Contractor shall bear all risks of injury, loss, or damage to any part of the Work arising from the elements or from any other cause. Contractor shall rebuild, repair, restore, and make good at no cost to Department all injuries, losses, or damage to any portion of the Work occasioned by any cause and shall at no expense to Department provide suitable drainage and erect such temporary structures and take all other actions as are necessary for the protection of the Work. Suspension of the Work or the granting of an extension in Contract Time for any cause shall not relieve Contractor of its responsibility for the Work as herein specified.
- 12.2.5 Contractor's responsibilities under this Paragraph 12.2 are in addition to, not in lieu of, all other obligations imposed by these Contract Documents.

Access to Work:

12.3 Representatives of Department, Engineer, and representatives of testing agencies and governmental agencies with jurisdictional interests will have access to the Work at all times for observation, inspection and testing. Contractor shall provide proper and safe conditions for such access. Inspections, tests or observations by Engineer, Department or third parties may be performed to provide information to Department on the progress of the Work, however, this provision is not intended to create any duty or obligation to Contractor by Department or Engineer, nor is the information provided intended to fulfill Contractor's obligations under the Contract.

Tests and Inspections:

- 12.4 Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests or approvals.
- 12.5 If a Law specifically requires any Work (or part thereof) to be inspected, tested or approved, Contractor shall assume full responsibility therefor, pay all costs in connection therewith and furnish to Engineer the required certificates of inspection, testing or approval. Except as provided in Article 5, Contractor shall be responsible for and shall pay all costs in connection with any inspection or testing required in connection with Department's or Engineer's acceptance of materials or equipment proposed or submitted to Department and Engineer for approval prior or subsequent to Contractor's purchase thereof for incorporation in the work. The cost of all inspections, tests and approvals in addition to the above which are required by the contract documents shall be paid by Contractor.

- 12.6 All inspections, tests or approvals other than those required by Law to be performed or given by public body having jurisdiction over the Work or any part thereof, shall be performed by organizations acceptable to Department and Engineer. Contractor shall perform sufficient inspection and testing of the Work to support the warranty and guarantee requirements of paragraph 12.1 and 12.2 of the General Conditions. Reference is made to the Supplementary Conditions, Standard Specifications and Supplementary Specifications for provisions applicable to the procurement of an independent testing laboratory.
- 12.7 If any Work, including the work of others, that is to be inspected, tested or approved is covered without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for inspection. Such uncovering shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.
- 12.8 Neither inspections by Engineer nor inspections, tests or approvals by others shall relieve Contractor from Contractor's obligations to perform the Work in accordance with the Contract Documents.

Uncovering Work:

- 12.9 If any work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's inspection and replaced at Contractor's expense.
- 12.10 If Engineer considers it necessary or advisable that covered Work be inspected by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose or otherwise make available for observation, inspection or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material and equipment.
 - 12.10.1 If it is found that such Work is Defective, Contractor shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing, and of satisfactory reconstruction, including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by Department due to delays to others performing work under a separate contract with Department, and other contractual obligations, Contractor shall further bear the responsibility for keeping the Work on schedule and shall not be entitled to any extension of Contract Time or recovery of any delay damages due to the uncovering.
 - 12.10.2 If, however, such Work is not found to be Defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction pursuant to Articles 9, 10 and 11.
 - 12.10.3 When covered Work is uncovered and found to be Defective, all direct, indirect and consequential costs as established in paragraph 12.10.1 shall be paid by Contractor. In the event that Contractor fails to pay such costs within thirty days after receipt of an invoice from Department, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount as an appropriate reduction in the Contract Price, and if the parties are unable to agree as to the amount thereof, the Contractor may make a claim therefore as provided in Articles 9 and 10 of the General Conditions.

Department May Stop the Work:

- 12.11 If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, Department may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Department to stop the Work shall not give rise to any duty on the part of Department to exercise this right for the benefit of Contractor or any other party.
 - 12.11.1 Contractor shall bear all direct, indirect and consequential costs of such order to Contractor to stop Work including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by Department due to delays to others performing work under a separate contract with Department, and other contractual obligations, and Contractor shall further bear the responsibility for maintaining schedule and shall not be entitled to any extension of contract time or recovery of any delay damages due to the order to stop Work.
 - 12.11.2 In the event that Contractor fails to pay such costs within thirty days after receipt of an invoice from Department, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount as an appropriate reduction in the Contract Price. If the parties are unable to agree as to the amount thereof, the Contractor may make a claim therefore as provided in Articles 8, 9, 10, and 11 of the General Conditions.

Correction or Removal of Defective Work:

12.12 If required by Engineer, Contractor shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by Engineer, remove it from the site and replace it with non-defective Work that conforms with the Contract Documents. Contractor shall bear all direct, indirect and consequential costs of such correction or removal including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by Department due to delays to others performing work under a separate contract with Department, and other contractual obligations. Contractor shall further bear the responsibility for keeping the Work on schedule and shall not be entitled to any extension in Contract Time or recovery of any delay damages due to the correction or removal. In the event that Contractor fails to pay such costs within thirty days after receipt of an invoice from Department, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount, as an appropriate reduction in the Contract Price. If the parties are unable to agree as to the amount thereof, the Contractor may make a claim therefore as provided in Articles 8, 9, 10, and 11 of the General Conditions.

Acceptance of Defective Work:

12.13 If, instead of requiring correction or removal and replacement of defective Work, Department prefers to accept it, Department may do so. Contractor shall bear all direct, indirect and consequential costs attributable to Department's evaluation and determination to accept such Defective Work, such costs to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by Department due to delays to others performing work under a separate contract with Department, and other contractual obligations. Contractor shall further bear the responsibility for keeping the Work on schedule and shall not be entitled to any extension in Contract Time or recovery of any delay or acceleration damages due to Department's evaluation and determination to accept such Defective Work. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order may be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Department shall be entitled to an appropriate reduction in the Contract Price. In the event that Contractor fails to pay such costs within thirty days after receipt of an invoice from Department, or if the parties are unable to agree as to the amount thereof, Contractor may make a claim therefore as provided in Articles 8, 9, 10, and 11 of

the General Conditions. If the acceptance occurs after final payment, an appropriate amount will be refunded by Contractor to Department.

Department May Correct Defective Work:

If Contractor fails within a reasonable time after written notice of Engineer to proceed to correct and to correct Defective Work or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Department may, after seven days' written notice to Contractor, correct and remedy any such deficiency. To the extent necessary to complete corrective and remedial action, Department may exclude Contractor from all or part of the site, take possession of all or part of the work and suspend or terminate Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which Department has paid Contractor but which are stored elsewhere. Contractor shall allow Department, and Department's representatives, agents and employees such access to the site as may be necessary to enable Department to exercise the rights and remedies provided by this paragraph and the Contract Documents. All direct, indirect and consequential costs of Department in exercising such rights and remedies will be charged against Contractor in an amount approved as to reasonableness by Engineer, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Department shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Contractor may make a claim therefore as provided in Article 8, 9, 10, and 11. Such direct, indirect and consequential costs shall include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all costs of delay and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of Contractor's Defective Work. Contractor shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by Department of Department's rights and remedies hereunder.

ARTICLE 13 - Payments to Contractor and Completion

Schedule of Values:

13.1 The schedule of values established as provided in paragraph 1.4 and 1.6 of the General Conditions shall serve as the basis for progress payments. Progress payments for Unit Price Work shall be based on the number of units completed. Department will furnish Application for Payment forms.

Application for Progress Payment:

13.2 At least fourteen days before each progress payment is scheduled to be submitted to the Department, Contractor shall submit to Engineer for review an Application for Payment on forms furnished by Department filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by bills of sale, invoices or other documentation supporting the cost, together with documents warranting that Department has received the materials and equipment free and clear of all liens, charges, security interests and encumbrances (each and all of these terms are hereinafter referred to as "Liens"). Each Application for Payment shall contain a certification by Contractor that progress payments received from Department on account of the Work have been applied by Contractor and its Subcontractors to discharge in full all of Contractor's and its Subcontractors' obligations stated in the prior Application for Payment, and that

Contractor has verified the accuracy of the progress reported to have been completed by Contractor or its Subcontractors in the Application for Payment. Notwithstanding any other provisions of the Contract Documents to the contrary, neither Department nor Engineer are under any duty or obligation whatsoever to any Subcontractor or Supplier to insure that payments due and owing by Contractor to any of them are or will be made. Such parties shall rely only on Contractor's surety bonds for remedy of nonpayment by Contractor. The amount of retainage with respect to progress payments will be as provided for by the laws of New York State.

- 13.2.1 An Application for Payment a) will not be approved if the as-built documents, including but not limited to Drawings legibly marked in accordance with Contract Documents to record actual construction, are not kept current, and b) will not be approved until the completed as-built documents, showing all variations between the Work as actually constructed and as originally shown on the Drawings and other Contract Documents, have been inspected by Engineer. For the purpose of this paragraph, the as-built documents will be considered current if they include all of the documents itemized in paragraph 5.19 together with any other information that supplements or changes the original Contract Documents which has been delivered or otherwise made known to Contractor prior to the time when Application for Payment is to be reviewed by Engineer.
- 13.2.2 An Application for Payment will not be approved until Contractor has submitted and Engineer has reviewed the Progress Schedule and submittals required in Contract Documents which are due prior to that Application for Payment.

Contractor's Warranty of Title:

13.3 Contractor warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether or not incorporated in the Project, shall pass to Department no later than the time of payment free and clear of all Liens.

Review of Applications for Progress Payment:

- 13.4 Engineer shall, within five days after receipt of each Application for Payment, either recommend payment in writing and present the Application to Department or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the application. After presentation of the application for payment with Engineer's recommendation, the amount recommended shall be paid in accordance with New York State Law upon approval of the Department.
- 13.5 Department may refuse to make payment of the full amount recommended by Engineer for one or more of the following reasons: claims have been made against Department on account of Contractor's performance, or furnishing of the Work, Liens have been filed in connection with the Work, there are other facts or circumstances entitling Department to a set-off against the amount recommended, or Department has determined that Work performed by Contractor does not conform to Contract Documents including, but not limited to, moneys payable by Contractor to Department pursuant to the requirements of Articles 5 and 12 of the General Conditions. In the event of such refusal to pay the full recommended amount, Department must give Contractor prompt written notice (with a copy to Engineer) stating the reasons for such action.

Substantial Completion:

When Contractor considers all or part of the Work ready for its intended use, Contractor shall notify Department and Engineer in writing that the Work or specified part thereof, is substantially complete except

for items specifically listed by Contractor as incomplete, and request that Engineer issue a certificate of Substantial Completion for the Work, or such specified part thereof. Within a reasonable time thereafter, not to exceed 30 days, Department, Contractor and Engineer shall make an inspection of the Work, or specified part thereof, to determine the status of completion. If Engineer or Department does not consider the Work, or specified part thereof, substantially complete, Engineer shall notify Contractor in writing giving the reasons therefor, after consultation with the Department. If Engineer considers the Work, or part thereof, substantially complete, Engineer shall prepare and deliver to Department a tentative certificate of Substantial Completion for the Work, or part thereof which shall fix the date of Substantial Completion. There shall be attached to the certificate a list of items to be completed or corrected before final payment, and Engineer's written recommendation as to a division of responsibilities between Department and Contractor pending final payment including but not limited to security, operation, safety, maintenance, heat, utilities, insurance and warranties. Department shall have seven days after receipt of the tentative certificate with attachments during which to make written objection to Engineer as to any provisions of the referenced submittals and to direct a revision of the tentative certificate. Unless Department and Contractor agree otherwise in writing and so inform Engineer or Department directs the revision of the certificate of Substantial Completion for the Work, or specified part thereof, Engineer's recommendation will be binding on Contractor until final payment.

13.7 Department shall have the right to exclude Contractor from the Work, or part thereof, after the date of Substantial Completion for the Work, but Department shall allow Contractor reasonable access to complete or correct items on the tentative list.

Partial Utilization:

- 13.8 Department may use any finished part of the Work which has specifically been identified in the Contract Documents, or which Department, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Department without significant interference with Contractor's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:
 - 13.8.1 Department at any time may direct Contractor in writing to permit Department to use any such part of the Work which Department believes to be ready for its intended use and substantially complete. Contractor may certify to Department and Engineer that said part of the Work is substantially complete and request Engineer to issue certificate of Substantial Completion for that part of the Work. Within a reasonable time after such direction, Department, Contractor and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not determine that part of the Work to be substantially complete, Engineer will notify Department and Contractor in writing giving the reasons therefor. The provisions of paragraphs 13.6 and 13.7 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 13.8.2 Department may at any time direct Contractor in writing to permit Department to take over operation of any such part of the Work although it is not substantially complete. A copy of such request will be sent to Engineer and within a reasonable time thereafter Department, Contractor and Engineer shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If Contractor does not object in writing to Department and Engineer that such part of the Work is not ready for separate operation by Department, Engineer shall submit to Department a list of items to be completed or corrected together with a written recommendation as to a division of responsibilities between Department and Contractor, including but not limited to security, operation, safety, maintenance, utilities, insurance and warranties pending final payment for such

Work. Department shall have seven days to make written objection to Engineer's list and recommended division of responsibilities to direct a revision thereof. Such directed revision or otherwise objected list and recommended division of responsibilities, shall become binding upon Department and Contractor at the time when Department takes over such operation unless they shall have agreed otherwise in writing. During such operation and prior to Substantial Completion of such part of the Work, Department shall allow Contractor reasonable access to complete or correct items on said list and to complete other related Work.

Final Inspection:

13.9 Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will make a final inspection with Department and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to remedy such deficiencies.

Final Application for Payment:

all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 5.19) and other documents - all as required by the Contract Documents, and after Engineer has indicated that the Work is acceptable (subject to the provisions of paragraph 13.12), Contractor may make application for final payment following the procedures for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers satisfactory to Department of all Liens arising out of or filed in connection with the Work. In lieu thereof and as provided for by the laws of New York State and approved by Department, Contractor may furnish receipts or releases in full and an affidavit of Contractor that such receipts and releases include all labor, services, material and equipment for which a Lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Department or Department's property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If any Subcontractor or Supplier fails to furnish a release or receipt in full, Contractor may furnish a Bond or other collateral satisfactory to Department to indemnify Department against any Lien.

Final Payment and Acceptance:

13.11 If, on the basis of Engineer's inspection of the work during construction and final inspection, and Engineer's review of the final application for payment and accompanying documentation, Engineer has determined that the work has been completed in substantial conformance with the contract documents and Contractor's other obligations under the contract documents have been fulfilled, Engineer will, within ten days after receipt of the final application for payment, indicate in writing Engineer's recommendation of payment and present the application to Department for payment along with a certificate that the work was completed in substantial conformance with the contract documents. Thereupon Engineer will give written notice to Department and Contractor that the work is acceptable subject to the provisions of paragraph 13.13. Otherwise, Engineer will return the application to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application. After presentation to Department of the application and accompanying documentation, in appropriate form and substance, and with Engineer's recommendation and certification of substantial conformance with the Contract Documents, final payment will be paid by Department to Contractor in accordance with New York State Law. If Department believes deficiencies exist, it will so notify Engineer and Contractor in writing.

13.12 If, through no fault of Contractor, final completion of the Work is significantly delayed and if Engineer so confirms, Department shall, upon receipt of Contractor's final Application for Payment and recommendation of Engineer, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted.

Waiver of Claims:

- 13.13 The making and acceptance of final payment will constitute:
 - 13.13.1 A waiver of all claims by Department against Contractor, except claims arising from unsettled Liens, from Defective Work appearing after final inspection pursuant to paragraph 13.11 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by Department of any claims or rights with respect to Contractor's continuing obligations under the Contract Documents; and
 - 13.13.2 A waiver of all claims by Contractor against Department other than those previously made in writing and still unsettled.

ARTICLE 14 - Suspension of Work and Termination

Department May Suspend Work:

- 14.1 Department may for its convenience, order Contractor in writing at any time to suspend the Work or any portion thereof for such a period of time as Department may determine to be appropriate. A suspension of Work order will fix the date on which the Work, or portion thereof, will be resumed. Contractor shall resume the Work, or portion thereof, on the date so fixed.
 - 14.1.1 If the performance of the Work or portion thereof is suspended for a period of time which exceeds the Total Float available in the approved Progress Schedule for the portion or portions controlling the Work affected by a suspension of Work order pursuant to paragraph 14.1, or by an act of Department or Engineer in the administration of the Contract, or by Department's or Engineer's failure to act within the applicable latest dates substantiated in the approved Progress Schedule, Contractor will be allowed an increase in Contract Price or an extension in Contract Time, or both, necessarily caused by such suspension which extends the applicable latest dates in the approved Progress Schedule. However, no adjustment will be made under this paragraph of the General Conditions for any suspension to the extent: 1) that performance would have been so suspended by any other cause, including the fault and negligence of Contractor, or 2) for which an adjustment is provided, limited as to extent, or excluded under any other provision of the Contract Documents.
 - 14.1.2 Contractor shall deliver to Engineer a written Proposed Change Order including at a minimum, justification for the request within seven days or earlier if so required elsewhere in the Contract Documents, of the act or failure to act which Contractor believes gives rise to an adjustment in Contract Price or Contract Time pursuant to paragraph 14.1.1. Failure by Contractor to comply with the time requirements for delivery of written Proposed Change Orders will be considered to be a waiver by Contractor of any request for adjustment or claim for an increase in Contract Price or Contract Time for the period of time during which the Proposed Change Order has not been submitted.
 - 14.1.3 Contractor's proposal with all supporting data shall be delivered within 15 days of such notice or within twenty-two days of such occurrence, whichever is later, unless Department allows an

additional period of time to obtain more accurate data. Contractor shall prove that additional costs and delays were necessarily incurred which meet the criteria set forth in Articles 9, 10 and 11 of the General Conditions, despite Contractor's reasonable, prudent, and diligent efforts to prevent such costs or delays.

14.2 In addition to the provisions of Appendix B, if Department stops Work in accordance with Article 12.10 of the General Conditions or suspends Contractor's services in accordance with article 12.11, or suspends the work or any portion thereof because of Contractor's failure to prosecute the work and to protect persons and property, Contractor shall not be entitled to an extension of Contract Time or an increase in Contract Price.

Department May Terminate:

14.3 Department may serve written notice upon Contractor and its surety that it intends to terminate the Contract for cause upon the date specified which shall not be less than seven days from the date of the notice. Such notice shall contain the reasons for the intended termination which shall be effective on the date specified unless Contractor shall cease the violations(s) or make arrangements which are satisfactory to the Department to address the violation(s). Upon termination, the Department may exclude Contractor from the site and take possession of the Work and of all Contractor's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by Contractor without liability to Contractor for trespass or conversion, incorporate in the work all materials and equipment stored at the site or for which Department has paid Contractor but which are stored elsewhere, and finish the Work as Department may deem expedient. In such case Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct, indirect and consequential costs of completing the Work including but not limited to fees and charges of Engineers, architects, attorneys and other professionals and court costs, such excess will be paid to Contractor. If such costs exceed such unpaid balance, Contractor shall pay the difference to Department. Such costs incurred by Department will be approved as to reasonableness by Engineer and incorporated in a Change Order or Proposed Change Order.

Department may terminate for cause upon the occurrence of any one or more of the following events:

- 14.3.1 If Contractor commences a voluntary case under any chapter of the Bankruptcy Code, as now or hereafter in effect, or if Contractor takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;
- 14.3.2 If a petition is filed against Contractor under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against Contractor under any other federal or state law in effect at the time relating to bankruptcy or insolvency;
- 14.3.3 If Contractor makes a general assignment for the benefit of creditors;
- 14.3.4 If a trustee, receiver, custodian or agent of Contractor is appointed under applicable law or under contract, whose appointment or authority to take charge of property of Contractor is for the purpose of enforcing a lien against such property or for the purpose of general administration of such property for the benefit of Contractor's creditors;
- 14.3.5 If Contractor admits in writing an inability to pay its debts generally as they become due;

- 14.3.6 If Contractor fails to perform the Work in accordance with the Contract Documents, including, but not limited to, failure to supply sufficient skilled workers, or suitable materials or equipment, or failure to adhere to the progress schedule established under paragraph 1.6 as revised from time to time or failure to submit an updated schedule as required by paragraph 5.6;
- 14.3.7 If Contractor disregards Laws or Regulations of any public body having jurisdiction;
- 14.3.8 If Contractor disregards the authority of Engineer;
- 14.3.9 If Contractor filed certification in accordance with New York State Finance Law §139-k which was intentionally false or intentionally incomplete; or
- 14.4 Where Contractor's services have been so terminated by Department, the termination shall not affect any rights or remedies of Department against Contractor then existing or which may thereafter accrue. Any retention or payment or moneys due Contractor by Department will not release Contractor from liability.
- 14.5 The Department may without cause and without prejudice to any other right or remedy terminate the Contract for convenience upon seven days written notice to Contractor, it's surety and Engineer, and elect to abandon the Work and terminate the Agreement. In such case, Contractor shall be paid for all Work accepted by Department.

Contractor May Stop Work or Terminate:

14.6 If, through no act or fault of Contractor, Engineer fails to act on any Application for Payment within thirty days after it is submitted, or Department fails for one hundred and twenty days to pay Contractor any sum finally determined to be due by Department, then Contractor may, upon seven days' written notice to Department and Engineer, terminate the Agreement and recover from Department payment for all Work accepted by Department. In lieu of terminating the Agreement, if Engineer has failed to act on an Application for Payment or Department has failed to make any payment as aforesaid, Contractor may upon seven days' written notice to Department and Engineer stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve Contractor of the obligations under paragraph 5.3130 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with Department.

ARTICLE 15 - Miscellaneous

Notice and Service:

- 15.1 All notices, demands, requests, instructions, approvals and claims shall be in writing.
 - 15.1.1 Any notice to or demand upon Contractor shall be deemed sufficient if delivered to Contractor's representative at the site or if delivered to the individual proprietor if Contractor is an individual, to a partner if Contractor is a partnership or to an officer of the corporation if Contractor is a corporation, at the office of Contractor specified in the Contract Documents, or if deposited in the United States mail in a sealed, postage prepaid envelope, addressed to the principal office of Contractor listed in the Agreement, or if delivered with charges prepaid to any telegraph company for transmission, in each case addressed to the office of Contractor specified in the Contract Documents or faxed to the number provided in the Contract Documents and followed by written notice.

- 15.1.2 All notices or other papers required to be delivered by Contractor to Department, or to any of its representatives shall, unless otherwise specified in writing to Contractor, be delivered to Department at the office specified in the Contract Documents. Any other notice or demand upon Department shall be deemed sufficient if delivered to such office, or if deposited in the United States mail in a sealed, postage prepaid envelope, or if delivered, with the charges prepaid to any telegraph company for transmission, in each case addressed to such office or to such other representative of Department or to such other address as Department may subsequently specify in writing to Contractor for such purpose, or faxed to the number provided in the Contract Documents and followed by written notice.
- 15.1.3 Any written notice or other communication to Contractor's Surety or Sureties shall be delivered or mailed to the home office of the Surety or Sureties, or to the agent or agents who executed the Bonds on behalf of the Surety or Sureties.
- 15.1.4 Any such notice or demand shall be deemed to have been given or made as of the time of actual delivery, or, in the case of mailing or of telegrams, at the time of actual receipt thereof.

Computation of Time:

When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last calendar day of such period. If the last calendar day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the State of New York, such day will be omitted from the computation. This does not apply to contract completion time as set forth in Article 6 of the Agreement.

General:

- 15.3 Should Department or Contractor suffer injury or damage to person or property because of an act or omission to act of the other party, its employees or agents or others for whose acts the other party is legally liable, a Claim may be made therefore, in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.
- The duties and obligations imposed by these General Conditions and the rights and remedies available to the parties hereunder, including but not limited to the warranties, guarantees and obligations imposed upon Contractor by Contract Documents and all of the rights and remedies available to Department thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by New York State Laws, by special warranty or guarantee or by other provisions of the Contract Documents. The provisions of this paragraph shall be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy. All representations, warranties and guarantees made in the Contract Documents shall survive final payment and termination or completion of the Agreement.
- 15.5 The obligation of Contractor to maintain the Work, or any part thereof, until the completion of the Correction Period shall survive final payment and termination or completion of the Agreement.

No Waiver of Legal Rights:

- 15.6.1 Inspection by Engineer or by any of its duly authorized representatives, any measurement or report by Engineer, any order by Department for the payment of money, any payment for or acceptance or possession of any Work or any extension in Contract Time or any possession taken by Department shall not operate as a waiver of any provision of the Contract Documents, or any power therein preserved to Department, or of any right to damages therein provided. Any Waiver of any breach of this Contract shall not be held to be a waiver of any other or subsequent breach.
- Department reserves the right to correct any error that may be discovered in any estimate that may have been paid, and to adjust the same to meet the requirements of the Contract Documents. Department further reserves the right, should proof of Defective Work on the part of Contractor be discovered after the final payment has been made, to claim, and recover by process of law, such sums as may be sufficient to correct the error, or make good the defects in the Work.
- 15.6.3 Any waiver of any provision of the Contract Documents shall be specific, shall apply only to the particular item or matter concerned and shall not apply to other similar or dissimilar items or matters.

Affidavit and Release of Lien:

- 15.7.1 When the Work has been completed, Contractor shall execute a final release of Lien and an Affidavit declaring that all bills have been paid in full, and that the requirements of the New York State Labor Law have been complied with.
- 15.7.2 These documents will be furnished to Department on the forms provided by Department.
- 15.7.3 Contractor shall be responsible for obtaining and submitting these forms to Department for all subcontractors involved in the Work.

Recovery Rights Subsequent to Final Payment:

15.8 Department reserves the right, should an error be discovered in an Application for Payment or should proof of Defective Work or materials used by or on the part of Contractor be discovered after the final payment has been made, to claim and recover from Contractor or his Surety, or both, by process of law, such sums as may be sufficient to correct the error or make good the defects in the Work and materials.

General Guarantee:

15.9 Neither the final acceptance, nor final payment by Department, nor any provision of the Contract Documents, nor partial or entire use of the Work by Department, shall constitute an acceptance of Work not done in accordance with the Contract Documents or relieve Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. Contractor guarantees the remedy of all Defective Work and payment for all damage to other Work, persons or property resulting therefrom which shall occur within one year from the date of final acceptance unless a longer period is required by Contract Documents, by Law, or by standard practice. Department will give notice of observed Defective Work with reasonable promptness. Contractor shall ensure that its Surety shall be bound with and for Contractor in the faithful observance of this General Guarantee.

Audit; Access to Records:

- 15.10.1 In addition to the rights of access set forth in Appendix A, if Contractor has submitted Cost and Pricing Data in connection with the pricing of any Change Order, Proposed Change Order or Claim related to this Contract, Department and Engineer or any of their duly authorized representatives shall have the right to examine and audit all books, ledgers, records, and documents pertinent to all Cost and Pricing data available and relied upon by Contractor including but not limited to that used by Contractor in the determination of its Bid for the Work, in order to evaluate the accuracy, completeness, and currency of the Cost or Pricing data.
- 15.10.2 Contractor shall make available at Contractor's office at all reasonable times the materials described in paragraph 15.10.1 above, for examination, audit, or reproduction, until 6 years after final payment under this Contract.
 - 15.10.2.1 If this Contract is completely or partially terminated, the records relating to the Work terminated shall be made available for 6 years after any resulting final termination settlement.
 - 15.10.2.2 Records pertaining to appeals under Article 8 of Section VIII, "General Conditions," to litigation or the settlement of claims arising under or relating to the performance of this Contract shall be made available until disposition of such appeals, litigation, or claims.
- 15.10.3 A provision stating that all the requirements of this Article of Section VIII, "General Conditions" are applicable to Subcontracts under this Contract exceeding \$50,000 in value shall be inserted by Contractor in all such subcontracts.

Price Reduction for Defective Cost or Pricing Data:

- 15.11.1 This provision shall become operative only for any Change Order, or Proposed Change Order or claim settlement under this Contract involving aggregate increases and/or decreases in costs, plus applicable profits, of more than \$10,000; except that this provision shall not apply to any amendment to the Contract for which the price of the Work involved in the amendment is:
 - 15.11.1.1 Based on adequate price competition;
 - 15.11.1.2 Based on established catalog or market prices of commercial items sold in substantial quantities to the general public, or
 - 15.11.1.3 Set by New York State law.
- 15.11.2 If any price, including profit, negotiated in connection with any Change Order, Proposed Change Order or claim settlement under this provision, was increased because: 1) Contractor or a Subcontractor, Supplier, other person or organization furnished Cost and Pricing Data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data; 2) a designated or prospective Subcontractor, Supplier, other person or organization furnished Contractor Cost and Pricing Data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost and Pricing Data; or 3) any of these parties furnished data of any description that were not accurate, the price shall be changed accordingly and the Contract shall be adjusted to reflect the change. This right to a change in Contract Price is limited to that resulting from defects in data relating to amendments to the Contract for which this provision becomes operative under paragraph 16.11.1 above.

- 15.11.3 Any decrease in Contract Price under paragraph 16.11.2 above due to defective data from a designated or prospective Subcontractor, Supplier, other person or organization that was not subsequently awarded the Subcontract or purchase order shall be limited to the amount, plus applicable overhead and profit markup, by which 1) the actual Subcontract or purchase order or 2) the actual cost to Contractor, if there was no Subcontract or purchase order, was less than the prospective Subcontract or purchase order, cost estimate submitted by Contractor; provided, that the actual Subcontract or purchase order price was not itself affected by defective cost or Pricing data.
- 15.11.4 Before awarding any Subcontract or purchase order which exceeds or can be reasonably expected to exceed \$150,000 when entered into, or pricing any Change Order or Proposed Change Order or claim settlement involving a pricing adjustment expected to exceed \$10,000, Contractor shall require the Subcontractor, Supplier, other person or organization to submit Cost or Pricing data (actually or by specific identification in writing), unless the price is:
 - 15.11.4.1 Based on adequate price competition;
 - 15.11.4.2 Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or
 - 15.11.4.3 Set by New York State law.
- 15.11.5 Contractor shall require such Subcontractor, Supplier, other person or organization to certify in the form prescribed in the Contract Documents, that to best of its knowledge and belief, the data submitted under paragraph 15.11.4 is accurate, complete, and current as of the date of agreement on the negotiated price of the Subcontract, purchase order, Change Order, Proposed Change Order, or claim settlement affecting the Subcontract.
- 15.11.6 Contractor shall make the provisions of this Article applicable to all Subcontracts or purchase orders that exceed or can be reasonably expected to exceed \$150,000.

No Waiver:

- 15.12.1 The rights and remedies set forth in the Contract Documents are not exclusive and are in addition to any other rights and remedies provided by law or equity. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by New York State law.
- 15.12.2 No act or omission by Department or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract Documents, nor shall any such act or omission constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

Comparable or Equivalent Terms:

15.13.1 Contractor warrants, represents and guarantees that all of the prices, terms, warranties and benefits granted to Department under the Contract are comparable to or better than the equivalent terms, prices, warranties and benefits offered to any other existing customer for similar Work.

15.13.2 In addition to the other remedies available, Department may demand repayment for any excess payment, plus interest thereon, for failure of Contractor to comply with paragraph 15.13.1.

Unlawful Provisions Deemed Stricken:

15.14.1 If the Contract Documents contain any unlawful provisions, such unlawful provisions shall be of no effect. Any provision determined to be unlawful by a court of competent jurisdiction, shall be deemed stricken from the Contract Documents without affecting the validity of the remaining provisions of the Contract Documents.

All Legal Provisions Included:

15.15.1 All provisions of Law required to be included in the Contract Documents shall be and are inserted herein. If through mistake, neglect, oversight or otherwise, any such provision has not been included or included in improper form, upon the application of either party, the Contract Documents shall be amended in writing at no increase in Contract Price nor extension in Contract Time, so as to comply with the Law.

No Estoppel:

- 15.16 Department or any officer, employee, servant or agent thereof, shall not be estopped, bound or precluded by any determination, return, decision, approval, order, letter, payment or certificate made or given by Engineer or any other officer, employee, servant or agent of Department, at any time, either before or after final completion and acceptance of the Work and payment therefor:
 - 15.16.1 From showing the true and correct amount, classification, quality, and character of the Work completed and materials furnished by Contractor or any other person under the Contract, or from showing at any time that any determination, return, decision, approval, order, letter, payment, or certificate is untrue and incorrect, or improperly made in any particular, or that the Work or the materials or any part thereof, do not in fact conform to the Contract Documents; or,
 - 15.16.2 From demanding the recovery of any overpayments made to Contractor, or such damages as Department may sustain by reason of failure to perform each and every term, provision or condition of the Contract in accordance with its terms.

Prohibited Interests:

15.17 No official of Department who is authorized in such capacity on behalf of Department to negotiate, make, accept or approve or to take part in the negotiating, making or approving any architectural, engineering, inspection, construction or material supply contract or any Subcontractor in connection with the Work or the Project of which the Work is a part, shall be knowingly permitted by Contractor to become directly or indirectly interested personally in this Contract or in any part thereof. No officer, employee, architect, attorney, engineer or project representative of or for Department who is authorized in such capacity and in behalf of Department to exercise any executive, supervisory or other similar function in connection with the Work or the Project of which the Work is a part shall be knowingly permitted by Contractor to become directly interested personally in this Contract or in any part thereof.

No Third Party Beneficiary:

15.18 Contractor acknowledges and agrees that it is not a third party beneficiary to any other agreement between the Department and any third party and/or any work product prepared or work performed for the Department by any third party, including but not limited to the contract between and/or work or work product performed by the Engineer; that nothing in the bid documents or the contract document shall be construed so as to give the contractor any legal or equitable claim, right or remedy against any other party with whom the Department has contracted, including but not limited to the Engineer; that nothing in any separate agreement between Department and any third party, including but not limited to the Engineer shall be construed to give the contractor any legal or equitable claim, right or remedy against such third party; rather such agreements are acknowledged and agreed to be intended to be for the sole exclusive benefit of the parties thereto. Contractor further acknowledges and agrees that its sole rights and remedies in connection with its bidding and performance of the work to be performed by it under the bid documents and contract documents are limited to such rights and remedies as are provided under the bid documents and contract documents. Further, contractor acknowledges and agrees that no claim against any third party, including but not limited to the Engineer's performance of services for the Department pursuant to such separate contract.

Nothing herein shall release or waive any direct claim which the Department may have against any such separate contractor, including the Engineer, pursuant to the terms of the Department's contract with such third party.

Should any direct claim be brought by contractor against any third party in separate direct contractual relationship with the Department, contractor agrees to reimburse to the Department and to such separate contractor, including Engineer, their reasonable and necessary costs, including legal fees, incurred in the defense of such claim or claims.

SECTION IX

Supplementary Conditions

None

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SECTION X

Standard Specifications

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SECTION X - Standard Specifications

SPEC 00001 Progress Schedule

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SECTION X

Standard Specifications

SPEC 00001

Progress Schedule

1) Terms and Definitions

The terms listed below (or pronouns in place of them) have the following intent and meanings which are applicable to both the singular and plural thereof.

- a) Activity A part of the Work identified in the Progress Schedule, assigned a description, duration, certain codes, and other related Shop Drawing data, and Cost and Pricing data, and evaluated to start and finish in accordance with Early and Late Schedules.
- b) *Activity, Critical* An Activity is considered to be Critical when it is evaluated to have the minimum value of Total Float Time available in the Progress Schedule.
- c) Activity, Value That portion of the contract Price which represents a fair value for the part of the Work identified by that Activity.
- d) As-Built Schedule Term used to denote record schedule drawings and data substantiating how the Work was performed as to timing, sequencing and rate of progress.
- e) **Bar Chart Diagram** A graphical representation of how the Work is to be performed as shown by timing each activity between a single choice of anticipated start and finish dates.
- f) *Critical Path* The sequence of Critical Activities from the Date for Commencement of the Contract Time, or Contract Times, to Substantial Completion of the Work, or part thereof.
- g) Critical Path Method Diagram A graphical representation of how the Work is to be performed as represented by the sequencing and timing of the Activities. A CPM Diagram shall either follow an "arrow" (I-J) format, wherein the start of an Activity is dependent upon the finish of preceding Activities, or a "precedence" format, wherein either the start or finish of an Activity is dependent upon either the start or finish of preceding Activities.
- h) **Dummy restraints** Activities not identifying a part of the Work, and used to preserve proper logic sequencing, avoid duplicate Activity numbering, to enforce Work Sequences indicated in or required by the Contract Documents, or to achieve other preferential sequencing chosen by **Contractor**.
- Duration (Activity) Estimated or required time of performance for the part of the Work represented by that Activity.

- j) *Free Float* Working days by which an Activity may be delayed from its Early Schedule, without delaying any other Activities from their Early Schedules.
- k) *Contract Float* Working days between the date(s) for Substantial Completion shown for the Work, or part thereof, in **Contractor's** anticipated Early Schedule, and the corresponding Contract Time or Contract Times.
- 1) *Total Float* Working days between the Early Schedule and the Late Schedule for an Activity by which that Activity may be delayed without necessarily extending the Contract time, or Contract Times.
- m) *Early Schedule (Late Schedule)* The proposed Early Dates (Late Dates) of performance for the parts of the Work represented by the Activities. The Early dates are predicated on proceeding with the Work, or part thereof, exactly on the date when the Contract Time, or applicable Contract Time, commences to run; and the Late dates are based on achieving Substantial Completion of the Work, or part thereof, exactly on the Contract Time, or applicable Contract Times.
- n) *Percent Complete* That portion of an Activity which when multiplied by the Activity Value will yield a fair proportion of the Contract Price for that part of the Work completed.
- o) **Preferential Logic Contractor's** approach to sequencing of the Work over and above those sequences indicated in or required by the Contract Documents. Examples include equipment restraints, crew movements, form reuse, special logic (lead/lag) restraints, etc. factored into the Progress Schedule instead of disclosing the associated Float Times.

2) Requirements Included

- a) Pursuant to the requirements of the Contract Documents, **Contractor** shall prepare and submit, finalize, and periodically adjust the Progress Schedule as required herein.
- b) This Section of the Specifications requires **Contractor** to plan, manage, schedule and execute the Work in accordance with a Progress Schedule meeting the requirements of the Contract Documents; that **Contractor's** Progress Schedule stay current with **Contractor's** approach to performing Work remaining; that the Progress Schedule, when approved, be jointly used by **Owner**, **Engineer** and **Contractor** to substantiate or mitigate the impact of delays and Change Orders; and that **Contractor** prepare record schedule drawings and data showing how the Work is being performed as to sequencing, timing, and rate of progress.

3) **Bar Chart Description**

a) A Bar Chart Diagram does not show express logic ties, nor does it compute Early or Late Dates as defined above. Although a Bar Chart Diagram may show Contract Float time, it does not disclose Activity Total Float values.

- b) Total Float and Contract Float are not for the exclusive benefit of **Owner**, **Engineer**, **Contractor**, or others, but is time available to all parties as needed for the Contract as a whole. Such Float times shall be shared between **Owner**, **Engineer**, **Contractor** and others to absorb delays which could not be mitigated by any other reasonable means.
- c) Activity representative quantities, Activity Value, Activity Percent Complete data, Activity Value of Work performed, and the applicable Value of significant subcomponents. The sum of all Activity Values shall equal the corresponding Contract Price for the Work. The sum of all Activity Values for Work performed divided by the Contract Price shall equal the Percent Complete for the Work.

4) Critical Path Method (CPM) Description

- a) The Progress Schedule shall be based on the Critical Path Method (CPM) of planning and scheduling, and prepared, finalized, and revised in accordance with the principles, definitions and terms described hereafter and those standards of the industry for CPM scheduling which are not in conflict with this Specification.
- b) CPM Diagrams shall show in detail the priority, sequencing and interdependence of Activities, and the sequence in which the Work is to be accomplished to: a) to comply with the Contract Time(s), named allowances, and those sequences of Work indicated in or required by the Contract Documents; b) to anticipate foreseeable events that may in any manner affect cost, progress, schedule, performance, and furnishing of the Work; and c) to reflect the means, methods, techniques, sequences, and procedures of construction anticipated by **Contractor**, subject to the limitations on Float sequestering set forth by this Specification.
- c) Total Float and contract Float are not for the exclusive benefit of Owner, Engineer, Contractor, OR OTHERS, but is time available to all parties as needed for the Contract as a whole. Such Float Times shall be shared between Owner, Engineer, Contractor and others to absorb delays which could not be mitigated by any other reasonable means. Use of Float Time shown in the approved progress Schedule for interim milestones or Contract Times will be available to Owner, if required to effect proper interfacing between work performed.
- d) Use of float suppression techniques such as preferential sequencing, special lead/lag logic restraints, extended Activity times, imposed Activity dates, scheduling items of Work required for Final Completion as though they were prerequisites to Substantial Completion, and others, and 2) use of Float time disclosed or implied by the use of alternate Float suppression techniques will be allowed, provided: a) that **Contractor** not engage in Float manipulations which have the net effect of "sequestering" Float, that is to reduce unilaterally otherwise available Float Time by more than 50 percent; and b) that **Contractor** agrees that in order to mitigate the impact of delays to the Work, or parts thereof, adjustment or removal of such Float suppression techniques will be a prerequisite to consideration of any requests for compensation for delay or acceleration or for extensions in Contract Time.
- e) The finalized Schedule of Values will be acceptable to **Engineer** as to form and substance, and will serve as the basis for progress payments.

f) The finalized Schedule of Shop Drawing submissions will be acceptable to **Engineer** as providing a workable arrangement for processing the submissions.

5) Progress Schedule Submittals for CPM Schedules

- a) All CPM Diagrams, Schedule of Values, Schedule of Shop Drawing submissions, associated computer reports, and narratives submitted by **Contractor** shall be consistent with the requirements of this Specification.
- b) The "Preliminary" submittal set shall consist of:
 - 1) A CPM Diagram and associated Schedule of Values and a supporting narrative.
 - 2) A User Manual for the scheduling software to be used by **Contractor** for the purposes of computation of the Progress Schedule.
- c) The "Interim" submittals shall consists of the interim CPM Diagram and associated Schedule of Values and Schedule of Shop Drawings submissions and a supporting narrative.
- d) The "Detailed" submittal set shall consist of:
 - 1) The Detailed CPM Diagram, and the reports associated with the Schedule of Values, and Schedule of Shop Drawing submissions, and a supporting narrative.
 - 2) The five associated Activity reports described in paragraph 18.A sorted by each of the first four sequencing criteria described in paragraph 18.D.
- e) "Status" submittal sets shall consist of "mark-up" versions of the current Detailed CPM Diagram, Schedule of Values, and Schedule of Shop Drawings, together with a supporting narrative.
- f) "Update" submittal sets shall consist of revised Detailed CPM Diagrams, Schedule of Values and Schedule of Shop Drawings, the six associated computer reports, a detailed **Contractor's** Cost report, and a supporting narrative.
- g) The "Contract Completion" submittal set shall consist of the Detailed Contract Completion Schedule, and associated computer reports.
- h) The "As-Built" submittal set shall consist of the As-Built CPM Diagram, and a "Schedule Reconciliation" report.

6) Quality Assurance of Progress Schedule

- a) **Engineer** will review and if acceptable, approve the Progress Schedule.
- In preparing a version of the Progress Schedule, pursuant to paragraph 1.6 of the General Conditions and Supplementary Conditions, it is the responsibility of **Contractor** 1) to inspect the preaward "Preliminary Progress Schedule" submitted in compliance with Article 11 of Section III of the Contract Documents, 2) to verify site conditions that may in any manner affect cost, scheduling, progress, performance and furnishing of the Work,

- 3) to work with each major Subcontractor, Supplier, or other relevant person or organization to obtain information on Activities, sequencing, and Activity Durations for incorporation into the Progress Schedule, and 4) to request and obtain written interpretations from **Engineer** as needed.
- c) The Detailed Progress Schedule shall break down the Work into Activities in sufficient detail to identify clearly all individual parts of the Work and those factors which may in any manner affect the cost, schedule, progress, performance, and furnishing of the Work. At a minimum, the break down of the Work in the detailed Progress Schedule submittal for CPM schedules only, shall delineate the following:
 - 1) Those Activities designating the date for commencement of the Contract Time, or Contract Times; those Activities leading to Substantial Completion of the Work, or parts thereof; and those Activities identifying parts of the Work to be performed or furnished leading from Substantial Completion to Final Completion.
 - 2) All special Work sequences, schedule milestones, intermediate Contract Times, and named allowances set forth in the Contract Documents.
 - 3) Items pertaining to securing prerequisite permits and approvals from those agencies with jurisdiction over Work to be performed under the Contract.
 - 4) All items of Work involved in the preparation, submittal, review and approval of Shop Drawings and samples required by the Specifications.
 - 5) Appropriate times required for the fabrication, delivery, receipt and inspection, and storage of items of materials and equipment.
 - 6) Work associated with installation, erection and other field construction activities.
 - 7) Items of Work required to work around existing physical conditions and Underground Facilities which are at or contiguous to the site including the time for permanent or temporary relocation of such existing physical conditions and/or underground facilities.
 - 8) Items of interface which relate to the responsibilities of **Owner**, **Engineer** or other contractors performing work under separate contracts with **Owner**.
 - 9) Work required to implement cut-offs or closures, power shutdowns or temporary or permanent take-down or interruptions to existing facilities or affecting the operations of **Owner**, utilities or similarly involved third-parties. Specific dates when such cut-offs, etc. are to take place shall be shown as milestone dates on the appropriate Activities.
 - All items of Work related to shop and field testing, associated trimout activities and specified manufacturer or supplier training required prior to placing the facilities in service, including but not limited to manufacturer or supplier installation checks; leak, disinfection and pressure tests; removal or erection of temporary components; tie-ins; flushing and chemical/mechanical cleaning operations; specified performance tests; and other necessary non-operating tasks adjustments, cold-alignment checks, corrections, housekeeping and spare parts stocking required of **Contractor** to conform to the Pre-operational testing

requirements of the Contract Documents.

- All items of Work associated with the performance of the Start-Up Testing requirements of the Contract Documents, including, but not limited to, trial operation tests and operator training, performance tests under simulated and design operating conditions, emission testing, final acceptance or guarantee tests.
- Work related to the tentative list of items to be completed or corrected before and subsequent to Pre-operational, Startup Testing and Final Testing.
- d) The following limitations shall also apply to the selection and scoping of Activities for CPM schedules only:
 - 1) Activity Durations shall be in working days and represent **Contractor's** best estimate of the time required for completion based on the Work included and the resources planned for that Activity. The computation of the Activity dates shall be based on a calendar recognizing the applicable holidays and the limitations on Work during hours other than the normal working hours set forth in the General Conditions and the Supplementary Conditions.
 - 2) Unless otherwise provided in the Special Progress Schedule Requirements, all Activities, except those identifying Work related to Shop Drawings and deliveries, shall span twenty working days or less, and their Values shall not exceed \$45,000. Duration requirements for Activities identifying Work related to **Engineer's** review of Shop Drawing or sample submissions are prescribed in the Special progress Schedule Requirements.
 - 3) Installation Activities shall not combine Work located in separate structures, buildings or facilities, nor Work corresponding to different Divisions of the Specifications. Submittal and associated delivery Activities shall identify each submittal required by the Sections of the specifications. Activities identifying Work in connection with Pre-Operational or Start-up Testing shall not combine Work pertaining to the different Division within the specifications.
 - 4) Reference is made to Article 1.11 of this specification for the identification of allowances and their incorporation into the Progress Schedule.
 - 5) Items that qualify as (a) on-site stored materials, fixtures and equipment and (b) undelivered equipment, shall be separately identified on the Progress Schedule.

7) References for CPM Schedules

- a) The text "Precedence and Arrow Networking Techniques for Construction," by R.B. Harris (Wiley, 1978), provides principles, definitions and terms common to CPM arrow and precedence diagrams, and schedule computations therefrom.
- b) The provisions of this Section are binding on **Contractor** in the event of a conflict between the Standard Specifications and this Specification.

8) Review of Progress Schedule Submittals

- a) **Engineer's** and **Owner's** review of **Contractor's** Progress Schedule submittals will be only for conformance with the Contract Time(s), those sequences of Work indicated in or required by the Contract Documents, the Float sharing concepts established in the Contract Documents, and for compliance with the requirements of this Specification and the information given in the Contract Documents. **Engineer's** and **Owner's** review, comments and exceptions taken, if any, shall not extend to, nor constitute directions nor approval of, the means, methods, techniques, sequences, or procedures of construction or safety precautions, the correctness of which shall be the sole responsibility of **Contractor**.
- b) Engineer's and Owner's review of progress schedule submittals will be predicated on a Contractor's stamp of approval signed off by Contractor. Contractor's stamp of approval on Progress Schedule submittals shall constitute a representation to Owner that Contractor has either determined or verified all data on the Progress Schedule submittal, or assumes full responsibility for doing so, and that Contractor and his Subcontractors, Suppliers or other persons or organizations have reviewed and coordinated the sequences shown in the Progress Schedule with the requirements of the Work under the Contract Documents.
- c) Engineer's and Owner's review will not be intended to be for the purpose of determining the accuracy of other matters that may be contained in the submittals. When the review of a Progress Schedule results in a number of comments or exceptions taken, Engineer and Owner does not warrant that these comments are inclusive of all variations, as it shall remain the responsibility of Contractor to meet the requirements of the contract documents and to identify expressly any proposed variations.
- d) **Engineer's** and **Owner's** review of progress schedule submittals shall not relieve **contractor** from responsibility for any variations from the requirements of the Contract Documents unless **Contractor** has in writing, by means of a specific notice, called **Engineer's** attention to each variation, and **Engineer** has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Progress Schedule submittal.
- e) **Engineer's** approval of Progress Schedule submittals will not relieve **Contractor** from responsibility for errors and omissions in the submittals or from responsibility for having complied with the provisions of General Conditions and Supplementary Conditions. Approval of a Progress Schedule with undisclosed variations or errors such as omitted Work or erroneous sequences will not relieve **Contractor** from completing the omitted or impacted Work within the applicable Contract Time(s).
- f) Progress Schedules that include Activities with negative Float Times, or Activities scheduled beyond the applicable Contract Time(s), will not be approved until a specific Change Order or Proposed Change Order authorizing appropriate changes to the impacted Contract Time(s) is agreed upon between **Owner** and **Contractor**.
- g) When reviewed by **Engineer** and **Owner**, each progress schedule submittal will be returned stamped as either "approved," "approved as noted," "resubmit with revisions," or "disapproved." Submittals stamped as "approved" or "approved as noted" will indicate approval thereof, subject to the limitations set forth, and will be considered to represent the approved progress schedule as of the date in the approval stamp until an updated progress schedule is submitted by **Contractor** and approved by **Owner** and **Engineer**.

- h) If **Contractor** believes that **Engineer's** approval of a progress schedule justifies an increase or decrease in contract price or an extension or shortening in contract time, **Contractor** shall be required to deliver a proposed change order thereof to **Engineer** in accordance with the provisions of article 9 of the general conditions. If **Owner** and **Contractor** are unable to agree as to amount and extent thereof, a claim maybe made pursuant to Articles 10 and 11 of the General Conditions.
- Costs associated with Engineer's and Owner's review and return of a progress schedule submission after the Engineer's second time review shall be borne by Contractor. Owner's charges to Contractor for additional reviews will be equal to Engineer's charges to Owner under the terms of Engineer's agreement with Owner. In the event Contractor fails to pay such costs within 30 days after receipt of an invoice from Owner, a change order or proposed change order will be issued incorporating the unpaid amount, and Owner will be entitled to an appropriate decrease in Contract Price.
- j) No partial submittals will be reviewed. Submittals not complete will be returned to **Contractor** for resubmittal.

9) **Delays and Recovery**

- a) Reference is made to the General Conditions and the Supplementary Conditions for Contract requirements related to delays, conditions warranting extensions in Contract Time(s), and conditions applicable to reimbursement for delay costs.
- b) Whenever **Contractor** fails to complete an activity within its late date on the approved progress schedule, **Contractor** shall, within five days or with the next application for payment, whichever comes earlier, submit a written statement to **Engineer** describing the cause for the slippage in the Activity and the actions being considered by **Contractor** to recover the time lost and to prevent or mitigate any derived slippage beyond the applicable Contract Time(s).
- c) A written schedule recovery statement shall include, but not be limited to, such actions as overlapping of dependent Activities, sequencing changes to accommodate increased Activity concurrency, assignment of additional labor or equipment, shift or overtime Work, expediting of submittals or deliveries, or any combination of the foregoing.
- d) If **Contractor** refuses, fails or neglects to submit a required written schedule recovery statement, **Owner** may, at its option, withhold additional retainage pursuant to the Contract Documents and/or initiate default termination proceedings in accordance with Contract Documents or request **Engineer** to identify and to order alternate recovery actions on the basis of the information in the current Progress Schedule. If **Contractor** believes that a written order to recover schedule from **Engineer** justifies an increase in Contract Price or an extension in Contract Time, **Contractor** shall be required to deliver a written request thereof in accordance with the provisions of Article 9 of the General Conditions. If **Owner** and **Contractor** are unable to agree as to responsibility for the slippage in the schedule or the amount and extent thereof, a claim may be made pursuant to Articles 10 and 11 of the General Conditions.

10) Early-Completion Progress Schedules

a) Progress Schedules anticipating achievement of Substantial Completion ahead of the

- corresponding Contract Time(s), and disclosing appropriate Contract Float Time(s) for the Work, or parts thereof, shall be considered equivalent or equal to Progress Schedules anticipating Substantial Completion exactly on the Contract Time(s). In accordance with requirements of the Contract Documents, the contract Float Time in these equivalent or equal Progress Schedules will be available to **Owner**, **Engineer**, **Contractor** and others to absorb delays to the Work as a whole which cannot be mitigated by any other means.
- b) Progress Schedules anticipating achievement of Substantial Completion ahead of the corresponding Contract Time(s), but with zero Contract Float as opposed to positive Contract Float, will be returned as either "Approved as Noted," "Resubmit with Revisions," or "Disapproved." Submittals stamped as "Approved as Noted" will indicate Engineer's approval thereof, subject to the limitations set forth, including Engineer's computation of the appropriate Contract Float implied by the anticipated early completion.
- c) If upon approval (or approval as noted) by **Engineer** of a Progress Schedule with disclosed or implied Contract Float Time, Contractor disputes the availability of Contract Float and proposes that compensation for delay shall be measured from the anticipated early completion date(s) as opposed to the corresponding Contract Time(s), **Contractor** agrees and understands that said proposal will represent a request to **Owner** that the approved Progress Schedule be evaluated as a substitute Progress Schedule for the purposes of changing the Contract Time(s) to those supported by the Contractor's earlycompletion Progress Schedule. Evaluation of that substitution will be in accordance with the requirements of paragraphs 5.7.1, 5.7.2 and 5.7.3 of the General conditions, and will require additional supporting data that explains and substantiates the basis of the anticipated Early Schedules. Such supporting data shall consist of: 1) notice of any scheduled Work during hours other than normal work hours, 2) information related to rates of production including pertinent quantities, crew sizes, man-day requirements, major items of equipment, etc., for Critical and other significant Activities, 3) express or implied contingency allowances figured in for Activities for such factors as weather, delays, activities of Owner AND Engineer to respond to reports of differing site conditions, and other relevant factors. Acceptance of that substitution will be evidenced by a Change Order shortening the Contract Time, or Contract Times accordingly, but maintaining the Contract Price and the provisions for liquidated and actual damages set forth in the Agreement.

11) Cash Allowance - Scheduling Subcontractor

- a) It is understood that **Contractor** has included in the Contract Price the allowance stipulated in the Bid Form so named in the Contract Documents and shall cause the Work so covered to be done by the Scheduling Subcontractor and for such sums within the allowance as maybe acceptable to **Owner** and **Engineer**.
- b) It is also understood that **Contractor** has included in the Contract Price sufficient funds to cover all costs in excess of the allowance in connection with Work to be done by the Scheduling Subcontractor.

c) Contractor's costs for administering the performance of Work by the Scheduling Subcontractor, for participating in the preparation of the required progress Schedule submittals, for overhead, profit and other expenses contemplated for the allowance have been included in the Contract Price for the Work and not in the allowance for the Scheduling Subcontractor. No demand for additional payment on account of any costs thereof will be valid.

12) Time Allowance Requirements for Document Review and Other Activities

- a) **Contractor** shall make allowances for time required for a) document review and approval of submittals of Shop Drawings and samples specified in this Specification, b) the requirements for anticipated repeat submissions for particular items of materials or equipment, and c) the requirements for anticipated or required time intervals for the performance of specific parts of the Work by **Contractor**.
- b) **Contractor** shall make allowances for time required by a) those other activities indicated in or required by the contract Documents which are the responsibility of **Owner** or **Engineer**, b) the potential time requirements of **Owner** and **Engineer** to investigate instances of potential differing site conditions, and c) those other named time allowances required by the Contract Documents.
- c) It is understood that **Contractor** has included in the Contract Price the effect of accommodating all of these time allowances and requirements in the planning, scheduling and execution of the Work; that **Contractor's** Progress Schedule will incorporate Activities and sequences contemplated by the time allowances based on the information indicated in or required by the Contract Documents; and that **Contractor** shall cause the Work or requirements covered by such time allowances to be done within the limits of the Contract Time(s).

13) Measurement and Payments

- All costs in connection with these requirements, including the Work to be performed by the Scheduling Subcontractor, shall be borne by Contractor. Payments made to Contractor under the allowance for the Scheduling Subcontractor provided for in paragraph 11.A shall be disbursed in their entirety to the Scheduling Subcontractor.
- b) Payments for Work performed under this Section of the Specifications will be made pursuant to Article 9 of the Agreement. Payment for Work performed shall be in accordance with the schedule of payments in the Special Progress Schedule Requirements.

14) *Compliance*

a) If **Contractor** refuses, fails or neglects to provide the required Progress Schedules or related schedule, Pricing and cost data, Shop Drawing data, or schedule recovery data, he will be deemed not to have provided sufficient information to **Engineer** upon which progress can be evaluated, and **Engineer** may refuse to recommend the whole or part of any outstanding payment if, in the **Engineer's** opinion, it would be incorrect to make such representations to **Owner**. Further, and pursuant to the Article 14 of the General Conditions, **Owner** may refuse to make payment of those amounts recommended by **Engineer** because of **Contractor's** failure or refusal to provide the required Progress Schedule and related submittal data.

15) Acceptable CPM Diagrams

- a) Interim and Detailed CPM Diagrams shall be based on an arrow or precedence diagram format, and sequenced by the separate structures, facilities, buildings or site areas.
- b) CPM Diagrams shall be allotted on a time-scaled calendar and expressly identify: 1) the Contract Times, 2) the approach taken to comply with the Work Sequence conditions, 3) the Critical Path(s), and 4) all Activities. Activities shall be shown on their Early Schedule, and their total Float Times noted beside them.
- c) CPM Diagrams shall include title blocks identifying the name and location of the Project, Contract designation, names of **Owner**, **Engineer**, **Contractor** and Scheduling Subcontractor, Progress Schedule issue number and date, and sheet title. Diagram sheets shall be dimensioned as the full-size Contract Drawings, be neat and legible and submitted on a medium suitable for reproduction. Connections between Activities on different sheets shall be shown on the different sheets of the CPM Diagrams to allow a complete schedule document.

16) Acceptable Activity Schedule Data for CPM Diagrams

- a) Activity schedule information shall, at a minimum, include the following data:
 - 1) Activity identified, i.e., I-J numbers in arrow format, or alphanumeric numbers in precedence format, such that not more than one Activity, dummy, or restraint may have the same identifier.
 - 2) Activity Description for each Activity, dummy or preferential restraint shall fully convey the scope of the Work included.
 - 3) Special Activity codes designating: a) location of the Work, e.g., site areas, elevations, etc., b) Work breakdown, e.g., process, trade, performing organization, c) responsibility, e.g., **Contractor**, **Owner**, Subcontractors, etc., d) as-awarded from amended (added or deleted by a Change Order or Proposed Change Order) items of Work.
 - 4) Activity labor requirements, based on a proportionate share of the (direct) labor manhours and quantities in the associated items from the Contract Price Breakdown developed pursuant to the requirements of the Supplementary Conditions.
 - 5) The use of start or finish restraint dates must be annotated as to the basis for the chosen restraints.

17) Acceptable Activity Value and Shop Drawing Data

- a) Activity data pertaining to the Schedule of Values shall at a minimum include the following for each Activity:
 - 1) Activity code and description as on the CPM Diagram.

- 2) Activity representative quantities, Activity Value, Activity Percent Complete data, Activity Value of Work performed, and the applicable Value of significant subcomponents. The sum of all Activity Values shall equal the corresponding Contract Price for the Work. The sum of all Activity Values for Work performed divided by the Contract Price shall equal the Percent Complete for the Work.
- 3) Activity Values shall breakdown Value for anticipated stored materials from Value for Work installed, as applicable.
- 4) Cost of equipment or materials to be incorporated in the Work shall be assigned to the appropriate fabrication and delivery Activities.
- b) Activity data pertaining to the Schedule of Shop Drawing submissions shall at a minimum include the following for each Activity:
 - 1) Activity code and description as on the CPM Diagram.
 - 2) A list of specific submissions, Specification Section, Contract Drawing sheet numbers, and applicable submission dates.
- c) The Schedule of Values and the Schedule of Shop Drawing submissions shall be provided on forms acceptable to **Engineer**.

18) Acceptable Scheduling Software

- a) **Contractor's** evaluation of the CPM Diagrams shall be based on scheduling software meeting the data management, computational, and reporting requirements of this Specification. Activity reports provided by the scheduling software selected shall, at a minimum, display the following data for each Activity, dummy, or restraint:
 - 1) Activity identifier, activity description, activity duration, activity man-days, computed or restrained Early Start date, computed Early Finish date, computed Late Start date, computed or restrained Late Finish date, Total Float and Free Float, Activity Value, Percent Complete, Activity Value for Work performed, and associated Activity list items (e.g., Shop Drawing submissions).
 - 2) Dates shall be in calendar form. Contract Times representing Substantial Completion requirements shall be set as restrained Late Finish Dates where applicable; Contract Times representing Commencement of Work conditions shall be shown as restrained Early Start Dates as applicable. Contract Float times shall be computed and shown pursuant to the definition in Attachment A.
- b) If the CPM Diagram is based on the precedence format, an additional computer report tabulating the sequences on the Diagram shall be provided showing: a) each Activity together with a listing of all of its preceding and succeeding Activities, and b) the relationship type, lead/lag types, and lead/lag times between each Activity and each of its preceding and succeeding Activities.
- c) The scheduling software shall have the capability of sorting out computer reports by the special Activity codes designated in 17(a) above.
- d) The scheduling software shall have the capability of sequencing computer reports by:

- 1) Activity identifier, in order of ascending I-J number.
- 2) Activity identifier, in order of descending J-I number.
- Total Float, in order of ascending Total Float values, and by ascending Early Start Dates, or by ascending I-J numbers, or by descending J-I numbers, within the same Total Float values.
- 4) Early Start dates in chronological order of Early Start dates, and by ascending I-J numbers within the same Early Start Dates.
- 5) Late Finish dates, in chronological order of Late Finish Dates and by descending J-I numbers within the same Late Finish Dates.
- 6) Change Order or Proposed Change Order No.
- e) In addition to the ability to process the required Activity data, the scheduling software shall offer the following features: a) the capability of accepting and processing schedules with actual start and actual finish dates for the Activities; b) processing of CPM schedules with negative Total Float values; c) printing or plotting of rate of progress data, such as labor utilization and payment curves; d) the ability of drawing CPM Diagrams using plottergraphics.

19) Acceptable Progress Schedule Narratives

- a) A narrative shall include sufficient information to substantiate the basis of the data used to develop that Progress Schedule submittal, and detail:
 - 1) The status of the Progress Schedule in terms of number of days ahead or behind the Contract Time, or Contract Times.
 - 2) The progress status (i.e., progress achieved vs. that forecasted) for a) Activities designating accomplishment of Substantial Completion, b) Critical and other significant Activities, c) Work related to achieving milestones set forth by the Work Sequences indicated in or required by the Contract Documents, d) long-lead delivery items of material or equipment.
 - The assumptions made in incorporating Work related to pending or authorized Change Orders and Proposed change Orders.
 - 4) Actual or potential delays, including causes, the steps taken or anticipated to mitigate their impact, and the anticipated effect on the Progress Schedule as a whole.
 - 5) Schedule recovery statement describing actions under consideration by **Contractor** to recover from a negative float or overrun in Late Finish Date condition.

- 6) Any significant changes in Progress Schedule sequences, and their basis thereof. Significant sequencing changes shall be those affecting Critical Activities, or causing a substantial reduction or increase in the Total Float Times available.
- 7) **Owner** and **Engineer** Activities which become due over the next two months on account of **Contractor's** requirements for performing Work which follows such **Owner** and **Engineer** Activities.
- 8) Rate of progress or "momentum" curves showing: a) the anticipated levels of labor utilization, e.g., man-days per week, and b) the anticipated level of payments for Work to be performed, all in accordance with the Activity time frames supported by the Early and Late Dates in the Progress Schedule.
- 9) Other information relevant to or of concern in the planning, scheduling and execution of Work over the next two months.
- 10) **Contractor's** responses to **Engineer's** comments raised in the review of the previous Progress Schedule submittal.
- Actions taken to address schedule noncompliance issues which have negated **Engineer's** approval of a previous Progress Schedule submittal.

20) Acceptable Contractor's Cost Data

- a) Cost data for inclusion in the **Contractor's** Cost reports required with each Progress Schedule Update submittal shall detail Contract financial and budget data available to and customarily relied upon by **Contractor** to monitor financial and cost performance.
- b) Acceptable financial and cost data for each cost account used by **Contractor** to approportion the contract Price to separable parts of the Work shall include:
 - 1) Account number and description.
 - 2) Account estimate data, identifying labor, material and equipment, and Subcontract costs for that account is included in the **Contractor's** Bid estimate, together with the sum increase or decrease in associated authorized Change Orders or Proposed Change Orders, and those sums anticipated by proposed Change Orders in negotiation or claims pending resolution.
 - 3) Current labor, material and equipment, and Subcontract cost data for the account; percent complete for the Work designated by that account; and **Contractor's** current forecast of the cost to complete Work designated by the account.

* END OF SECTION *

06/06 00001-14

SECTION X - Standard Specifications

SPEC 00002 Concrete

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SECTION X - Standard Specifications

SPEC 00002 Concrete

1) **General**

1.1 Scope of Work

a) The Contractor shall furnish all labor, materials, equipment, and incidentals needed for the cast-in-place and/or precast concrete required by the Contract Documents and as herein specified.

1.2 **Submittals**

- a) Cast-in-place concrete.
 - 1) Name and location of batch plant.
 - 2) Design mix.
 - 3) Shop drawings indicating placement of all reinforcing inserts, location of joints, sealing of joints, etc.
 - 4) Submittal on grating and frame.
- b) Precast concrete
 - 1) Name and location of precaster.
 - 2) Submittals of precast units.
 - 3) Certifications of design for loading.
 - 4) Submittal on manhole frame and cover.

1.3 **Quality Assurance**

- a) Codes and Standards
 - 1) Comply with the provisions of the following codes and standards, except as otherwise shown or specified:
 - a) ACI 301 "Specifications for Structural Concrete for Buildings."
 - b) ACI 318 "Building Code Requirements for Reinforced Concrete."
 - c) CRSI "Manual of Standard Practice."
 - d) ACI 305 "Recommended Practice for Hot Weather Concreting."

2) Where provisions of the above codes and standards are in conflict with the building code in force for the project, the more stringent code shall apply.

2) **Products**

2.1 **Cast-In-Place Concrete**

- a) Portland Cement ASTM C 150, Type III.
- b) Aggregates ASTM C 33
 - 1) Fine aggregates clean, sharp, natural sand free of dune sand, bank run sand, manufactured sand, loam, clay, etc.
 - 2) Coarse aggregate clean processed natural limestone free of all foreign matter.
- c) Water clean, fresh, free of all oils, acids organics, etc.
- d) Admixtures.
 - 1) Air-Entraining ASTM C 260.
 - 2) Water-Reducing ASTM C 494.
 - 3) Floor sealer Sonoglaze is manufactured by Sonneborn Building Products or similar product by Master Builders.
- e) Concrete Qualifiers.
 - 1) Concrete mix shall be DOT Class E.
 - 2) Strength 4,000 psi at twenty-eight (28) days with maximum water-cement ratio of 0.45.
 - 3) Air content 6 percent.
 - 4) Slump limits 3-4 inch.
- f) Reinforcing
 - 1) Bars ASTM A615, Grade 40.
 - 2) Welded Wire Fabric ASTM A185.
- g) Frame and Grating (Reteculine)
 - 1) The frames, gratings, and appurtenances shall be fabricated from steel conforming to ASTM A36.
 - 2) All parts shall be galvanized according to the requirements of the NYSDOT 719-01 type 1.

3) Grating shall be provided with lock down bolt anchors.

h) Waterstops

- 1) Waterstops to be 6" PVC dumbbell style, made of virgin raw materials.
- 2) Waterstops shall be #747 as manufactured by Greenstreak, #8046 as manufactured by Vulcan Metal Products, Inc., or equal.

2.2 **Precast Concrete Units**

- a) Precast concrete units shall be of sizes shown and built in accordance with ASTM standards C913-89. Units to be designated to withstand H-20 loading.
- b) Manhole cover and frame shall conform to NYSDOT Standard 715-05, Class No. 30. Units shall be supplied with lock down device.

3) **Execution**

3.1 Concrete Placement

- a) General Place concrete in compliance with the practices and recommendations of ACI-304, and herein specified.
- b) Deposit and consolidate concrete slabs in a continuous operation, within the limits of construction joints, until the placing of a panel or section is complete. In the event that the slab is placed in two sections, the sections shall have continuous waterstops.
- c) Consolidate concrete during placing operations using mechanical vibrating equipment, so that concrete is thoroughly worked around reinforcing and other embedded items and into corners.
- d) Bring slab surfaces to the correct level with a straight edge strike off. Use bull floats or darbies to smooth the surface, leaving it free of humps or hollows.

3.2 Cold Weather Placing

- a) Protect all concrete work from physical damage or reduced strength which could be caused by frost, freezing actions, or low temperatures.
- b) When air temperature has fallen to or is expected to fall below 40° F, uniformly heat all water and aggregate before mixing, to obtain a mixture temperature of not less than 50° F and not more than 80° F at point of placement.
- c) Do not use calcium chloride, salt, and other materials containing antifreeze agents or chemical accelerators.

3.3 **Monolithic Slab Finish**

- a) Begin float finishing when surface water has disappeared or when concrete has stiffened sufficiently to permit the operation of a power-driven float. Check surface plane to a tolerance not to exceed 1/4 inch in 10 feet, with uniform slopes to drains.
- b) Begin the final toweling when the surface produces a ringing sound as the trowel is moved over the surface.

3.4 Concrete Curing and Protection

- a) Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- b) Weather permitting, keep placed concrete continuously moist for not less than 72 hours.

3.5 **Concrete Floor Sealer**

- a) Concrete slab shall be fully cured, cleaned, and etched.
- b) Apply sealer as recommended by manufacturer or as specified in the contract documents.

* END OF SECTION *

SECTION X - Standard Specifications

SPEC 00003 Minimum Requirements for Health and Safety

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SPEC 00003

MINIMUM REQUIREMENTS FOR HEALTH AND SAFETY

1. GENERAL

1.01 Description

- **A.** The **CONTRACTOR** is solely responsible and liable for the health and safety of all on-site personnel and any off-site community potentially impacted by the remediation.
- B. This section describes the minimum health and safety requirements for this project including the requirements for the development of a written Health and Safety Plan (HASP). All on-site workers must comply with the requirements of the HASP. The CONTRACTOR'S HASP must comply with all applicable federal and state regulations protecting human health and the environment from the hazards posed by activities during this site remediation. The HASP is a required deliverable for this project. The HASP will be reviewed by the ENGINEER. The CONTRACTOR will resubmit the HASP, addressing all review comments from the ENGINEER. The CONTRACTOR shall not initiate on-site work in contaminated areas until an acceptable HASP addressing all comments has been developed.
- C. Consistent disregard for the provision of these health and safety specifications shall be deemed just and sufficient cause for immediate stoppage of work and/or termination of the Contract or any Subcontract without compromise or prejudice to the rights of the **DEPARTMENT** or the **ENGINEER**.
- **D.** Any discrepancies between this HASP and the specifications (or OSHA requirements) shall be resolved in favor of the more stringent requirements as determined by the **ENGINEER**.

1.02 Basis

A. The Occupational Safety and Health Administration (OSHA) Standards and Regulations contained in Title 29, Code of Federal Regulations, Parts 1910 and 1926 (20 CFR 1910 and 1926) and subsequent additions and/or modifications, the New York State Labor Law Section 876 (Right-to-Know Law), the Standard Operating Safety Guidelines by the United States Environmental Protection Agency (EPA), Office of Emergency and Remedial Response and the Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (NIOSH, OSHA, USCG, and EPA) provide the basis for the safety and health program. Additional specifications within this section are in addition to OSHA regulations and reflect the positions of both the EPA and the National Institute for Occupation Safety and Health (NIOSH) regarding procedures required to ensure safe operations at abandoned hazardous waste disposal sites.

B. The safety and health of the public and project personnel and the protection of the environment will take precedence over cost and schedule considerations for all project work. Any additional costs will be considered only after the cause for suspension of operations is addressed and work is resumed. The ENGINEER's on-site representative and the CONTRACTOR's Superintendent will be kept appraised, by the Safety Officer, of conditions which may adversely affect the safety and health of project personnel and the community. The ENGINEER may stop work for health and safety reasons. If work is suspended for health and/or safety reasons, it shall not resume until approval is obtained from the ENGINEER. The cost of work stoppage due to health and safety is the responsibility of the CONTRACTOR under this Contract.

1.03 Health and Safety Definitions

- **A.** The following definitions shall apply to the work of this Contract:
 - 1. Project Personnel: Project personnel include the **ENGINEER**, the **ENGINEER's** On-site Representatives, **CONTRACTOR**, Subcontractors, and Federal and State Representatives, working or having official business at the Project Site.
 - 2. Authorized Visitor: Authorized visitors who work for the State of New York shall receive approval to enter the site from the **DEPARTMENT**. The Safety Officer has primary responsibility on determining who is qualified and may enter the site. The Site Safety Officer will only allow authorized visitors with written proof that they have been medically certified and trained in accordance with 29 CFR 1910.120 to enter the contamination reduction zone and/or exclusion area.
 - 3. Health and Safety Coordinator (HSC): The HSC shall be a Certified Industrial Hygienist (CIH) or Certified Safety Professional (CSP) retained by the **CONTRACTOR**. The HSC will be responsible for the development and implementation of the HASP.
 - 4. Safety Officer (SO): The SO will be the **CONTRACTOR's** on-site person who will be responsible for the day-to-day implementation and enforcement of the HASP.
 - 5. Health and Safety Technicians (HST): The HST(s) will be the **CONTRACTOR's** on-site personnel who will assist the SO in the implementations of the HASP, in particular, with air monitoring in active work areas and maintenance of safety equipment.
 - 6. Medical Consultant (MC): The MC is a physician retained by the **CONTRACTOR** who will be responsible for conducting physical exams as specified under the Medical Monitoring Programs in this section.
 - 7. Project Site: The area designated on the Site Sketch, which includes the Contractor Work Area.
 - 8. Contractor Work Area: An area of the project site including the Support Zone, access road, staging area, and Exclusion Zone.

- 9. Contractor Support Zone: An area of the Contractor Work Area outside the Exclusion Zone, accessible for deliveries and visitors. No persons, vehicles, or equipment may enter these areas from the Exclusion Zone without having gone through specified decontamination procedures in the adjacent Contamination Reduction Zone.
- 10. Staging Areas: Areas within the Exclusion Zone for the temporary staging of contaminated soil and debris.
- 11. Exclusion Zone: The innermost area within the Contractor Work Area that encloses the area of contamination. Protective clothing and breathing apparatus as specified in the health and safety requirements and in the **CONTRACTOR's** approved HASP must be worn.
- 12. Contamination Reduction Zone: An area at the Exit Point of the Exclusion Zone through which all personnel, vehicles, and equipment must enter and exit. All decontamination of vehicles and equipment and removal of personal protective clothing and breathing apparatus must take place at the boundary between the Exclusion Zone and the Contamination Reduction Zone.
- 13. **ENGINEER's** on-site representative: The **ENGINEER's** representative assigned responsibility and authority by the **ENGINEER** for day-to-day field surveillance duties.
- 14. Work: Work includes all labor, materials, and other items that are shown, described, or implied in the Contract and includes all extra and additional work and material that may be ordered by the **ENGINEER**.
- 15. Monitoring: The use of direct reading field instrumentation to provide information regarding the levels of gases and/or vapor, which are present during remedial action. Monitoring shall be conducted to evaluate employee exposures to toxic materials and hazardous conditions.

1.04 Responsibilities

- **A.** The **ENGINEER** will be responsible for the following:
 - 1. Reviewing the HASP for the acceptability for its personnel and the impact on the site and human health.
 - 2. Reviewing modifications to the HASP.
- **B.** The **CONTRACTOR** will be responsible for the following:
- C. The **CONTRACTOR** will perform all work required by the Contract Documents in a safe and environmentally acceptable manner. The **CONTRACTOR** will provide for the safety of all project personnel and the community for the duration of the Contract.

D. The **CONTRACTOR** shall:

- 1. Employ an SO who shall be assigned full-time responsibility for all tasks herein described under this HASP. In the event the SO cannot meet his responsibilities, the **CONTRACTOR** shall be responsible for obtaining the services of an "alternate" SO meeting the minimum requirements and qualifications contained herein. No work will proceed on this project in the absence of an approved SO.
- 2. Ensure that all project personnel have obtained the required physical examination prior to and at the termination of work covered by the contract.
- 3. Be responsible for the pre-job indoctrination of all project personnel with regard to the HASP and other safety requirements to be observed during work, including but not limited to (a) potential hazards, (b) personal hygiene principles, (c) personal protection equipment, (d) respiratory protection equipment usage and fit testing, and (e) emergency procedures dealing with fire and medical situations.
- 4. Be responsible for the implementation of this HASP, and the Emergency Contingency and Response Plan.
- 5. Provide and ensure that all project personnel are properly clothed and equipped and that all equipment is kept clean and properly maintained in accordance with the manufacturer's recommendations or replaced as necessary.
- 6. Alert appropriate emergency services before starting any hazardous work and provide a copy of the Emergency Contingency Plan to the respective emergency services.
- 7. Have sole and complete responsibility of safety conditions for the project, including safety of all persons (including employees).
- 8. Be responsible for protecting the project personnel and the general public from hazards due to the exposure, handling, and transport of contaminated materials. Barricades, lanterns, roped-off areas, and proper signs shall be furnished in sufficient amounts and locations to safeguard the project personnel and public at all times.
- 9. Ensure all OSHA health and safety requirements are met.
- 10. Maintain a chronological log of all persons entering the project site. It will include organization, date, and time of entry and exit. Each person must sign in and out.

1.05 Health and Safety Plan

A. The HASP is a deliverable product of this project. The **ENGINEER** will review and comment on the **CONTRACTOR's** HASP. Agreed upon responses to all comments will be incorporated into the final copy of the HASP. The HASP shall govern all work performed for this contract. The HASP shall address, at a minimum, the following items in accordance with 29 CFR 1910.120(I)(2):

- 1. Health and Safety Organization.
- 2. Site Description and Hazard Assessment.
- 3. Training.
- 4. Medical Surveillance.
- 5. Work Areas.
- 6. Standard Operating Safety Procedures and Engineering Controls.
- 7. Personal Protective Equipment (PPE).
- 8. Personnel Hygiene and Decontamination.
- 9. Equipment Decontamination.
- 10. Air Monitoring.
- 11. Emergency Equipment/First Aid Requirements.
- 12. Emergency Response and Contingency Plan.
- 13. Confined-Space Entry Procedures.
- 14. Spill Containment Plan.
- 15. Heat & Cold Stress.
- 16. Record Keeping.
- 17. Community Protection Plan.
- **B.** The following sections will describe the requirements of each of the above-listed elements of the HASP.

1.06 Health and Safety Organization

- A. The **CONTRACTOR** shall list in the HASP a safety organization with specific names and responsibilities. At a minimum, the **CONTRACTOR** shall provide the services of a Health and Safety Coordinator, SO, Health and Safety Technician, and a Medical Consultant.
- B. Health and Safety Coordinator: The **CONTRACTOR** must retain the services of a Health and Safety Coordinator (HSC). The HSC must be an American Board of Industrial Hygiene (ABIH) Certified Industrial Hygienist (CIH) or a Certified Safety Professional (CSP). The HSC must have a minimum of two years experience in hazardous waste site remediations or related industries and have a working knowledge of federal and state occupational health and safety regulations. The HSC must be familiar with air monitoring techniques and the development of health and safety programs for personnel working in potentially toxic atmospheres.

In addition to meeting the above requirements the HSC will have the following responsibilities:

- 1. Responsibility for the overall development and implementation of the HASP.
- 2. Responsibility for the initial training of on-site workers with respect to the contents of the HASP.
- 3. Availability during normal business hours for consultation by the Safety Officer.
- 4. Availability to assist the Safety Officer in follow-up training and if changes in site conditions occur.
- C. <u>Safety Officer</u>: The designated SO must have, at a minimum, two years of experience in the remediation of hazardous waste sites or related field experience. The SO must have formal training in health and safety and be conversant with federal and state regulations governing occupational health and safety. The SO must be certified in CPR and first aid and have experience and training in the implementation of personal protection and air monitoring programs. The SO must have "hands-on" experience with the operation and maintenance of real-time air monitoring equipment. The SO must be thoroughly knowledgeable of the operation and maintenance of air-purifying respirators (APR) and supplied-air respirators (SAR) including SCBA and airline respirators.

In addition to meeting the above qualifications, the SO will be responsible for the following minimum requirements:

- 1. Responsibility for the implementation, enforcement, and monitoring of the health and safety plan.
- 2. Responsibility for the pre-construction indoctrination and periodic training of all on-site personnel with regard to this safety plan and other safety requirements to be observed during construction, including:
 - a. Potential hazards.
 - b. Personal hygiene principles.
 - c. PPE.
 - d. Respiratory protection equipment usage and fit testing.
 - e. Emergency procedures dealing with fire and medical situations.
 - f. Conduct daily update meetings in regard to health and safety.
- 3. Responsibility for alerting the **ENGINEER's** on-site representative prior to the **CONTRACTOR** starting any particular hazardous work.
- 4. Responsibility for informing project personnel of the New York State Labor Law Section 876 (Right-to-Know Law).

- 5. Responsibility for the maintenance of separation of Exclusion Zone (Dirty) from the Support Zone (Clean) areas as described hereafter.
- D. Health and Safety Technicians: The Health and Safety Technician (HST) must have one year of hazardous waste site or related experience and be knowledgeable of applicable occupational health and safety regulations. The HST must be certified in CPR and first aid. The HST will be under direct supervision of the SO during on-site work. The HST must be familiar with the operations, maintenance and calibration of monitoring equipment used in this remediation. An HST will be assigned to each work crew or task in potentially hazardous areas.
- E. <u>Medical Consultant</u>: The **CONTRACTOR** is required to retain a Medical Consultant (MC) who is a physician, certified in occupational medicine. The physician shall have experience in the occupational health area and shall be familiar with potential site hazards of remedial action projects. The MC will also be available to provide annual physicals and to provide additional medical evaluations of personnel when necessary.

1.07 Site Description and Hazard Assessment

- A. The **CONTRACTOR** shall perform a hazard assessment to provide information to assist in selection of PPE and establish air monitoring guidelines to protect on-site personnel, the environment, and the public. The **CONTRACTOR** shall provide a general description of the site, its location, past history, previous environmental sampling results, and general background on the conditions present at the site.
 - 1. <u>Chemical Hazards</u>: A qualitative evaluation of chemical hazards shall be based on the following:
 - Nature of potential contaminants;
 - Location of potential contaminants at the project site;
 - Potential for exposure during site activities; and
 - Effects of potential contaminants on human health.
 - 2. <u>Biological Hazards</u>: A qualitative evaluation of biological hazards consisting of the elements listed for chemical hazards.
 - 3. <u>Physical Hazards</u>: The **CONTRACTOR** shall assess the potential for physical hazards affecting personnel during the performance of on-site work.
- **B.** The **CONTRACTOR** shall develop a hazard assessment for each site task and operation established in the HASP.

1.08 Training

A. OSHA Training

- 1. The **CONTRACTOR** is responsible to ensure that all project personnel have been trained in accordance with OSHA 1910.120 regulations.
- 2. The **CONTRACTOR** shall ensure that all employees are informed of the potential hazards of toxic chemicals to the unborn child and of the risks associated with working at the project site.
- 3. The **CONTRACTOR** shall be responsible for, and guarantee that, personnel not successfully completing the required training are not permitted to enter the project site to perform work.

B. Safety Meetings

- 1. The SO will conduct daily safety meetings for each working shift that will be mandatory for all project personnel. The meetings will provide refresher courses for existing equipment and protocols, and will examine new site conditions as they are encountered.
- 2. Additional safety meetings will be held on an as-required basis.
- C. Should any unforeseen or site-specific safety-related factor, hazard, or condition become evident during the performance of work at this site, the **CONTRACTOR** will bring such to the attention of the SO in writing as quickly as possible for resolution. In the interim, the **CONTRACTOR** will take prudent action to establish and maintain safe working conditions and to safeguard employees, the public, and the environment.

1.09 Medical Surveillance

- A. The **CONTRACTOR** shall utilize the services of a Physician to provide the minimum medical examinations and surveillance specified herein. The name of the Physician and evidence of examination of all **CONTRACTOR** and Subcontractor on-site personnel shall be kept by the SO.
- **B. CONTRACTOR** and Subcontractor project personnel involved in this project shall be provided with medical surveillance prior to onset of work. Immediately at the conclusion of this project, and at any time there is suspected excessive exposure to substances that would be medically detectable, all project personnel will be medically monitored. The costs for these medical exams, including state field representatives, (four maximum) are to be borne by the **CONTRACTOR**.
- **C.** Physical examinations are required for:
 - 1. Any and all personnel entering hazardous or transition zones or performing work that required respiratory protection.
 - 2. All **CONTRACTOR** personnel on site who are dedicated or may be used for emergency response purposes in the Exclusion Zone.

- 3. **CONTRACTOR** supervisors entering hazardous or transition zones, or on site for more than 16 hours during the length of the contract.
- **D.** Physical examinations are not required for people making periodic deliveries provided they do not enter hazardous or transition zones.
- E. In accordance with good medical practice, the examining Physician or other appropriate representative of the Physician shall discuss the results of such medical examination with the individual examined. Such discussion shall include an explanation of any medical condition that the Physician believes required further evaluation or treatment and any medical condition which the Physician believes would be adversely affected by such individual's employment at the project site. A written report of such examination shall be transmitted to the individual's private physician upon written request by the individual.
- **F.** The examining Physician or Physician group shall notify the SO in writing that the individual has received a medical examination and shall advise the SO as to any specific limitations upon such individual's ability to work at the project site that were identified as a result of the examination. Appropriate action shall be taken in light of the advice given pursuant to this subparagraph.
- **G.** The physical examination shall also include but not be limited to the following minimum requirements:
 - 1. Complete blood profile;
 - 2. Blood chemistry to include: chloride, CO₂, potassium, sodium, BUN, glucose, globulin, total protein, albumin, calcium, cholesterol, alkaline phosphatase, triglycerides, uric acid, creatinine, total bilirubin, phosphorous, lactic dehydrogenase, SGPT, SGOT;
 - 3. Urine analysis:
 - 4. "Hands on" physical examination to include a complete evaluation of all organ systems including any follow-up appointments deemed necessary in the clinical judgement of the examining physician to monitor any chronic conditions or abnormalities;
 - 5. Electrocardiogram;
 - 6. Chest X-ray (if recommended by examining physician in accordance with good medical practice);
 - 7. Pulmonary function;
 - 8. Audiometry To be performed by a certified technician, audiologist, or physician. The range of 500 to 8,000 hertz should be assessed.
 - 9. Vision screening Use a battery (TITMUS) instrument to screen the individual's ability to see test targets well at 13 to 16 inches and at 20 feet. Tests should include an assessment of muscle balance, eye coordination, depth perception, peripheral vision, color discrimination, and tonometry.

- 10. Tetanus booster shot (if no inoculation has been received within the last five years); and
- 11. Complete medical history.

1.10 Site Control

A. Security

- 1. Security shall be provided and maintained by the **CONTRACTOR**.
- 2. The **CONTRACTOR** shall contact law enforcement officials, emergency medical care units, local fire departments and utility emergency teams to ascertain the type of response required in any emergency situation and to coordinate the responses of the various units. A standard operating procedure describing security force response to foreseeable contingencies shall be developed. The **CONTRACTOR** shall also prepare and update a list of emergency points of contact, telephone numbers, radio frequencies, and call signs to ensure dependable responses.
- 3. Security personnel shall record their presence while patrolling the site using a watchman's clock. The Tapes or punch cards shall be delivered to the **ENGINEER** once a week.
- 4. Security identification, specific to the project site, shall be provided by the **CONTRACTOR** for all project personnel entering the project site. The **CONTRACTOR** shall be responsible for and ensure that such identification shall be worn by each individual, visible at all times, while the individual is on the site. Vehicular access to the site, other than to designated parking areas, shall be restricted to authorized vehicles only.
- 5. Use of on-site designated parking areas shall be restricted to vehicles of the **ENGINEER**, **ENGINEER**'s on-site representative, **CONTRACTOR**, subcontractor, and service personnel assigned to the site and actually on duty but may also be used on short-term basis for authorized visitors.
- 6. The **CONTRACTOR** shall be responsible for maintaining a log of security incidents and visitor access granted.
- 7. The **CONTRACTOR** shall require all personnel having access to the project site to sign-in and sign-out, and shall keep a record of all site access.
- 8. All approved visitors to the site shall be briefed by the SO on safety and security, provided with temporary identification and safety equipment, and escorted throughout their visit.
- 9. Site visitors shall not be permitted to enter the hazardous work zone unless approved by the **DEPARTMENT** with appropriate site access agreement.
- 10. Project sites shall be posted, "Warning Hazardous Work Area, Do Not Enter Unless Authorized," and access restricted by the use of a snow fence or equal at a minimum. Warning signs shall be posted at a minimum of every 500 feet.

B. Site Control

- 1. The **CONTRACTOR** shall provide the following site control procedures as a minimum:
 - A site map;
 - A map showing site work zones;
 - The use of a "buddy system"; and
 - Standard operating procedures or safe work practices.

C. Work Areas

- 1. The **CONTRACTOR** will clearly lay out and identify work areas in the field and will limit equipment, operations and personnel in the areas as defined below:
 - a. Exclusion Zone (EZ) This will include all areas where potential environmental monitoring has shown or it is suspected that a potential hazard may exist to workers. The level of PPE required in these areas will be determined by the SO after air monitoring and on-site inspection has been conducted. The area will be clearly delineated from the decontamination area. As work within the hazardous zone proceeds, the delineating boundary will be relocated as necessary to prevent the accidental contamination of nearby people and equipment. The Exclusion Zone will be delineated by fencing (e.g., chain link, snow fencing, or orange plastic fencing).
 - b. Contamination Reduction Zone This zone will occur at the interface of "Hazardous" and "Clean" areas and will provide for the transfer of equipment and materials from the Support Zone to the Exclusion Zone, the decontamination of personnel and clothing prior to entering the "Clean" area, and for the physical segregation of the "Clean" and "Hazardous" areas. This area will contain all required emergency equipment, etc. This area will be clearly delineated by fencing (e.g., chain link, snow fencing, or orange plastic fencing). It shall also delineate an area that although not contaminated at a particular time may become so at a later date.
 - c. Support Zone This area is the remainder of the work site and project site. The Support Zone will be clearly delineated and procedures implemented to prevent active or passive contamination from the work site. The function of the Support Zone includes:
 - 1. An entry area for personnel, material and equipment to the Exclusion Zone of site operations through the Contamination Reduction Zone;
 - 2. An exit for decontamination personnel, materials and equipment from the "Decontamination" area of site operations;
 - 3. The housing of site special services; and
 - 4. A storage area for clean, safety, and work equipment.

1.11 Standard Operating Safety Procedures (SOSP), Engineering Controls

A. General SOSP

- 1. The **CONTRACTOR** will ensure that all safety equipment and protective clothing is kept clean and well maintained.
- 2. All prescription eyeglasses in use on this project will be safety glasses and will be compatible with respirators. No contact lenses shall be allowed on site.
- 3. All disposable or reusable gloves worn on the site will be approved by the SO.
- 4. During periods of prolonged respirator usage in contaminated areas, respirator filters will be changed upon breakthrough. Respirator filters will always be changed daily.
- 5. Footwear used on site will be covered by rubber overboots or booties when entering or working in the Exclusion Zone area or Contamination Reduction Zone. Boots or booties will be washed with water and detergents to remove dirt and contaminated sediment before leaving the Exclusion Zone or Contamination Reduction Zone.
- 6. All PPE used on site will be decontaminated or disposed of at the end of the work day. The SO will be responsible for ensuring decontamination of PPE before reuse.
- 7. All respirators will be individually assigned and not interchanged between workers without cleaning and sanitizing.
- 8. **CONTRACTOR**, subcontractor and service personnel unable to pass a fit test as a result of facial hair or facial configuration shall not enter or work in an area that requires respiratory protection.
- 9. The **CONTRACTOR** will ensure that all project personnel shall have vision or corrected vision to at least 20/40 in one eye.
- 10. On-site personnel found to be disregarding any provision of this plan will, at the request of the SO, be barred from the project.
- 11. Used disposable outerwear such as coveralls, gloves, and boots shall not be reused. Used disposable outerwear will be removed upon leaving the hazardous work zone and will be placed inside disposable containers provided for that purpose. These containers will be stored at the site at the designated staging area and the **CONTRACTOR** will be responsible for proper disposal of these materials at the completion of the project. This cost shall be borne by the **CONTRACTOR**.
- 12. Protective coveralls that become torn or badly soiled will be replaced immediately.
- 13. Eating, drinking, chewing gum or tobacco, smoking, etc., will be prohibited in the hazardous work zones and neutral zones.
- 14. All personnel will thoroughly cleanse their hands, face, and forearms and other exposed areas prior to eating, smoking or drinking.
- 15. Workers who have worked in a hazardous work zone will shower at the completion of the work day.
- 16. All personnel will wash their hands, face, and forearms before using toilet facilities.

- 17. No alcohol, firearms or drugs (without prescriptions) will be allowed on site at any time
- 18. All personnel who are on medication should report it to the SO who will make a determination whether or not the individual will be allowed to work and in what capacity. The SO may require a letter from the individual's personal physician stating what limitations (if any) the medication may impose on the individual.

B. Engineering Controls - Air Emissions

1. The **CONTRACTOR** shall provide all equipment and personnel necessary to monitor and control air emissions.

1.12 Personal Protective Equipment

A. General

- 1. The **CONTRACTOR** shall provide all project personnel with the necessary safety equipment and protective clothing, taking into consideration the chemical wastes at the site. The **CONTRACTOR** shall supply the **ENGINEER's** on-site personnel (average two people for the project duration) with PPE as specified. The **ENGINEER** will require specific manufacturers and styles of PPE, which are detailed in the Safety Equipment Specifications portion of this section. At a minimum, the **CONTRACTOR** shall supply all project personnel with the following:
 - a. Two (2) sets of cotton work clothing to include underwear, socks, work shirts, and work pants. Leather steel-toed work boots, and such other clothing and outer garments as required by weather conditions (e.g., insulated coveralls and winter jacket);
 - b. Sufficient disposable coveralls;
 - c. One pair splash goggles;
 - d. Chemical-resistant outer and inner gloves;
 - e. Rubber overshoes (to be washed daily);
 - f. Hard hat;
 - g. One full-face mask with appropriate canisters. The **ENGINEER** and the **DEPARTMENT** will supply their own full-face mask. The **CONTRACTOR** will supply the appropriate canisters to all on-site project personnel including the **ENGINEER** and the **DEPARTMENT**. The **CONTRACTOR** shall supply MSA canisters; and
 - h. For all project personnel involved with Level B protection, a positive-pressure SCBA or in-line air. A 5-minute escape bottle must be included with the in-line air apparatus.

B. Levels of Protection

1. It is planned that Levels C and D PPE will be required in this remediation. Although Levels A and B are not planned, site conditions may be encountered that

require their use. The following sections described the requirements of each level of protection.

a. Level A Protection

- 1. PPE:
- a. Supplied-air respirator approved by the Mine Safety and Health Administration (MSHA) and NIOSH. Respirators may be:
 - Positive-pressure SCBA; or
 - Positive-pressure airline respirator (with escape bottle for Immediately Dangerous to Life and Health [IDLH] or potential for IDLH atmosphere).
- b. Fully encapsulating chemical-resistant suit.
- c. Coveralls.
- d. Cotton long underwear.*
- e. Gloves (inner), chemical-resistant.
- f. Boots, chemical-resistant, steel toe and shank. (Depending on suit construction, worn over or under suit boot.)
- g. Hard hat (under suit).*
- h. Disposal gloves and boot covers (worn over fully encapsulating suit).
- i. Cooling unit.*
- j. Two-way radio communications (inherently safe).*
 - * Optional

2. Criteria for Selection:

Meeting any of these criteria warrants use of Level A protection:

- a. The chemical substance has been identified and requires the highest level of protection for skin, eyes, and the respiratory system based on:
 - Measures (or potential for) high concentration of atmospheric vapors, gases, or particulates, or
 - Site operations and work functions involves high potential for splash, immersion, or exposure to unexpected vapors, gases, or particulates of materials highly toxic to the skin.
- b. Substances with a high degree of hazard to the skin are known or suspected to be present, and skin contact is possible.
- Operations must be conducted in confined, poorly ventilated areas until the absence of substances requiring Level A protection is determined.
- d. Direct readings on field Flame Ionization Detectors (FID) or Photoionization Detectors (PID) and similar instruments indicate high levels of unidentified vapors and gases in the air.
- 3. Guidance on Selection:
- a. Fully encapsulating suits are primarily designed to provide a gasor vapor-tight barrier between the wearer and atmospheric contaminants. Therefore, Level A is generally worn when high concentrations of airborne substances could severely effect the skin. Since Level A requires the use of SCBA, the eyes and respiratory system are also more protected.

Until air surveillance data become available to assist in the selection of the appropriate level of protection, the use of Level A may have to be based on indirect evidence of the potential for atmospheric contamination or other means of skin contact with severe skin affecting substances.

Conditions that may require Level A protection include:

- Confined spaces: Enclosed, confined, or poorly ventilated areas are conducive to the buildup of toxic vapors, gases, or particulates. (Explosive or oxygen-deficient atmospheres are also more probable in confined spaces). Confined-space entry does not automatically warrant wearing Level A protection, but should serve as a cue to carefully consider and to justify a lower level of protection.
- Suspected/known highly toxic substances: Various substances that are highly toxic, especially skin absorption, for example, fuming corrosives, cyanide compounds, concentrated pesticides, Department of Transportation

Poison "A" materials, suspected carcinogens, and infectious substances may be known or suspected to be involved. Field instruments may not be available to detect or quantify air concentrations of these materials. Until these substances are identified and concentrations measured, maximum protection may be necessary.

- Visible emissions: Visible air emissions from leaking containers or railroad/vehicular tank cars, as well as smoke from chemical fires and others, indicate high potential for concentrations of substances that could be extreme respiratory or skin hazards.
- Job Functions: Initial site entries are generally walk-throughs, in which instruments and visual observations are used to make a preliminary evaluation of the hazards

In initial site entries, Level A should be worn when:

- There is a probability for exposure to high concentrations of vapors, gases, or particulates; and
- Substances are known or suspected of being extremely toxic directly to the skin or by being absorbed.

Subsequent entries are to conduct the many activities needed to reduce the environmental impact of the incident. Levels of protection for later operations are based not only on data obtained from the initial and subsequent environmental monitoring, but also on the probability of contamination and ease of decontamination.

Examples of situations where Level A has been worn are:

- Excavating of soil to sample buried drums suspected of containing high concentrations of dioxin;
- Entering a cloud of chlorine to repair a valve broken in a railroad accident;
- Handling and moving drums known to contain oleum; and
- Responding to accidents involving cyanide, arsenic, and undiluted pesticides.
- b. The fully encapsulating suit provides the highest degree of protection to skin, eyes, and respiratory system if the suit material resists chemicals during the time the suit is worn. While Level A provides maximum protection, all suit material may be rapidly permeated and degraded by certain chemicals from extremely high air concentrations, splashes, or immersion of boots or gloves in concentrated liquids or sludges. These limitations should be recognized when specifying the type of fully encapsulating suit. Whenever possible, the suit material should be matched with the substance it is used to protect against.

b. Level B Protection

- 1. PPE:
- a.. Positive-pressure SCBA (MSHA/NIOSH approved); or
- b. Positive-pressure air line respirator (with escape bottle for IDLH or potential for IDLH atmosphere) MSHA/NIOSH approved;
- c. Chemical-resistant clothing (overalls and long-sleeved jacket; coveralls or hooded, one- or two-piece chemical-splash suit; disposable chemical-resistant, one-piece suits);
- d. Cotton long underwear;*
- e. Coveralls;
- f. Gloves (outer), chemical-resistant;
- g. Gloves (inner), chemical-resistant;
 - h. Boots (inner), leather work shoe with steel toe and shank;
 - I. Boots (outer), chemical-resistant, (disposable);
 - j. Hard hat (face shield*);
 - k. 2-way radio communication;* and
 - 1. Taping between suit and gloves, and suit and boots.

*Optional

2. Criteria for Selection:

Any one of the following conditions warrants use of Level B Protection:

- a. The type and atmospheric concentration of toxic substances have been identified and require a high level of respiratory protection, but less skin protection than Level A. These atmospheres would:
 - Have IDLH concentrations; or
 - Exceed limits of protection afforded by an air-purifying mask; or
 - Contain substances for which air-purifying canisters do not exist or have low removal efficiency; or
 - Contain substances requiring air-supplied equipment, but substances and/or concentrations do not represent a serious skin hazard.

- b. The atmosphere contains less than 19.5% oxygen.
- c. Site operations make it highly unlikely that the work being done will generate high concentrations of vapors, gases or particulates, or splashes of material that will affect the skin of personal wearing Level B protection.
- d. Working in confined spaces.
- e. Total atmospheric concentrations, sustained in the breathing zone, of unidentified vapors or gases range from 5 ppm above background to 500 ppm above background as measured by direct reading instruments such as the FID or PID or similar instruments, but vapors and gases are not suspected of containing high levels of chemicals toxic to skin

3. Guidance on Selection Criteria:

Level B equipment provides a reasonable degree of protection against splashes and to lower air contaminant concentrations, but a somewhat lower level of protection to skin than Level A. The chemical-resistant clothing required in Level B is available in a wide variety of styles, materials, construction detail, permeability, etc. Taping joints between the gloves, boots and suit, and between hood and respirator reduces the possibility for splash and vapor or gas penetration. These factors all affect the degree of protection afforded. Therefore, the SO should select the most effective chemical-resistant clothing based on the known or anticipated hazards and/or job function. (It is anticipated that Level B protection will not be required under this contract.)

Level B does provide a high level of protection to the respiratory tract. Generally, if SCBA is required, Level B clothing rather than a fully encapsulating suit (Level A) is selected based on needing less protection against known or anticipated substances affecting the skin. Level B skin protection is selected by:

- a. Comparing the concentrations of known or identified substances in air with skin toxicity data;
- b. Determining the presence of substances that are destructive to or readily absorbed through the skin by liquid splashes, unexpected high levels of gases, vapor or particulates, or other means of direct contact; and
- c. Assessing the effect of the substance (at its measured air concentrations or splash potential) on the small area of the head and neck left unprotected by chemical-resistant clothing.

For initial site entry at an open site, Level B protection should protect site personnel, providing the conditions described in selecting Level A are known or judged to be absent.

c. Level C Protection

- 1. PPE
- a.. Full-face, air-purifying, cartridge- or canister-equipped respirator (MSHA/NIOSH approved) with cartridges appropriate for the respiratory hazards;
- b. Chemical-resistant clothing (coveralls, hooded, one-piece or two-piece chemical splash suit; chemical-resistant hood and apron; disposable chemical-resistant coveralls);
- c. Coveralls;
- d. Cotton long underwear;*
- e. Gloves (outer), chemical-resistant;
- f. Gloves (inner), chemical-resistant;
- g. Boots (inner), leather work shoes with steel toe and shank;
- h. Boots (outer), chemical-resistant (disposable);*
- i. Hard hat (face shield);*
- j. Escape SCBA of at least 5-minute duration;
- k. 2-way radio communications (inherently safe);* and
- 1. Taping between suit and boots, and suit and gloves.
 - * Optional
- 2. Criteria for Selection

Meeting all of these criteria permits use of Level C protection:

- a. Measured air concentrations of identified substances will be reduced by the respirator to, at or below, the substance's Threshold Limit Value (TLV) or appropriate occupational exposure limit and the concentration is within the service limit of the canister.
- b. Atmospheric contaminant concentrations do not exceed IDLH levels.
- c. Atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect the small area of the skin left unprotected by chemical-resistant clothing.
- d. Job functions do not require SCBA.
- e. Total readings register between background and 5 ppm above background as measured by instruments such as the FID or PID.
- f. Oxygen concentrations are not less than 19.5% by volume.

- g. Air will be monitored continuously.
- 3. Guidance on Selection Criteria

Level C protection is distinguished from Level B by the equipment used to protect the respiratory system, assuming the same type of chemical-resistant clothing is used. The main selection criterion for Level C is that conditions permit wearing air-purifying devices. The air-purifying device must be a full-face mask (MSHA/NIOSH approved) equipped with a cartridge suspended from the chin or on a harness. Cartridges must be able to remove the substances encountered.

A full-face, air-purifying mask can be used only if:

- a. Oxygen content of the atmosphere is at least 19.5% by volume;
- b. Substance(s) is identified and its concentrations(s) measured;
- c. Substance(s) has adequate warning properties;
- d. Individual passes a qualitative fit-test for the mask; and
- e. Appropriate cartridge is used, and its service limits concentration is not exceeded.

An air monitoring program is part of all response operations when atmospheric contamination is known or suspected. It is particularly important that the air be monitored thoroughly when personnel are wearing air-purifying respirators (Level C). Continual surveillance using direct-reading instruments and air sampling is needed to detect any changes in air quality necessitating a higher level of respiratory protection. Total unidentified vapor/gas concentrations exceeding 5 ppm above background require Level B.

d. Level D Protection

- 1. PPE:
- a. Coveralls, chemical resistant;

- b. Gloves (outer), chemical resistant;
- c. Gloves (inner), chemical resistant;*
- d. Boots (inner), leather work shoes with steel toe and shank;
- e. Boots (outer), chemical resistant (disposable);*
- f. Hard hat;
- g. Face shield;*
- h. Safety glasses with side shields or chemical splash goggles;* and
- i. Taping between suit and boots, and suit and gloves.
 - * Optional
- 2. Criteria for Selection:
- a. No atmospheric contaminant is present.
- b. Direct reading instruments do not indicate any readings above background.
- c. Job functions have been determined not to require respirator protection.
- 3. Guidance on Selection Criteria:

Level D protection is distinguished from Level C protection in the requirement for respiratory protection. Level D is used for non-intrusive activities or intrusive activities with continuous air monitoring. It can be worn only in areas where there is no possibility of contact with contamination.

e. Anticipated Levels of Protection

1. It is anticipated that most of the work shall be performed in Level D. A respirator shall be immediately available in the event that air monitoring indicates an upgrade to Level C is required. The determination of the proper level of protection for each task shall be the responsibility of the **CONTRACTOR**. These task specific levels of protection shall be stated in the **CONTRACTOR**'s HASP.

C. Safety Equipment Specifications

Note: Prior to purchasing any equipment or supplies required by this HASP, the **CONTRACTOR** shall notify the **ENGINEER** of the type, model and manufacturer/supplier of that particular safety equipment he is proposing to use or purchase for use on this project. The specifications for PPE that the **CONTRACTOR** is to supply to the **ENGINEER** and which differ from the minimum requirements shown below are provided at the end of this section.

D. Self-Contained Breathing Apparatus

1. The **CONTRACTOR** shall provide positive-pressure SCBA for possible upgrades in respiratory protection. The **CONTRACTOR** shall further supply all the SCBA for all field personnel for the duration of normal work activities. The units must be a MSHA/NIOSH-approved pressure-demand type with a 30-minute service life, manufactured/supplied by Scott, MSA, or other appropriate manufacturers. The **CONTRACTOR** shall inspect and maintain respirators in accordance with OSHA regulations (29 CFR 1910.13-4) and as recommended by the manufacturer.

E. Disposable Coveralls

1. The **CONTRACTOR** shall provide, as necessary, protective coveralls for all project personnel each day with extra sets provided for authorized visitors. The coveralls shall be of the disposable type made of Tyvek or equivalent material, and shall be manufactured/supplied by Durafab, Koppler, or other appropriate manufacturers. To protect project personnel from exposure to liquids, splash-resistant suits (Saranex suits, from appropriate manufacturers) shall be provided. Ripped suits will be immediately replaced after all necessary decontamination has been completed to the satisfaction of the SO.

F. Hard Hat

1. The **CONTRACTOR** shall provide and maintain one hard hat per person on site (authorized visitors included). The hard hats shall comply with OSHA Health and Safety Standards (29 CFR 1910.135).

G. Face Shields

1. The **CONTRACTOR** shall provide and maintain one face shield per person on site. The face shields shall be of the full face type meeting OSHA Health and Safety Standards (29 CFR 1910.133) and shall have brackets for mounting on hard hats. Hard hats and face shields shall be from the same manufacturer to ensure proper fit and shall be manufactured/supplied by Bullard, Norton, or other appropriate manufacturers.

H. Work Clothing

1. The **CONTRACTOR** shall provide a minimum of two sets of work clothing per personnel to allow for changing if contaminated. The work clothing shall include a minimum of underwear, socks, work shirts, work pants, and other clothing as weather conditions dictate. All work clothes shall be put on clean, before entering the site and shall not be kept in same lockers as the workers street clothes. All project personnel shall shower and change to street clothing prior to leaving the site. All contaminated work clothing shall be laundered on site with wash water drained to the decontamination water holding tank.

I. Escape-Type Respirator

1. The **CONTRACTOR** shall provide and maintain one self-contained breathing escape-type respirator per person working on site. The small self-contained device shall be capable of providing oxygen to the worker while protecting an escaping worker from toxic gases. The respirator shall be made by Scott, MSA, or other appropriate manufacturer. The **CONTRACTOR** shall inspect and ensure all devices are in working order before issuing to personnel. Employees must be trained to use equipment prior to being allowed to work on site and carry the escape-type respirator with them. An escape-type respirator must be provided if positive-pressure SCBA are not part of the ensemble worn by each person on site.

J. Full Face Organic Vapor Respirator

1. The **CONTRACTOR** shall provide and maintain a dedicated air-purifying organic vapor respirator per person working in hazardous work and neutral work zones. The respirator shall be of the full-face canister type with cartridges appropriate for the respiratory hazards. Respirators and cartridges shall be MSHA/NIOSH approved, manufactured/supplied by MSA, Scott, or other appropriate manufacturers. The **CONTRACTOR** shall inspect and maintain respirators and canisters in accordance with OSHA regulations (29 CFR 1910.134) and in accordance with manufacturer's instructions. The **CONTRACTOR** shall ensure that proper fit testing training and medical surveillance of respirator users is in accordance with OSHA regulations (29 CFR 1910.134).

K. Gloves (outer)

1. The **CONTRACTOR** shall supply a minimum of one pair of gloves per workman in areas where skin contact with hazardous material is possible. Work gloves shall consist of nitrile (NCR) or Neoprene material. Other gloves may be selected if required based on the potential chemical present. Cotton liners will be provided by the **CONTRACTOR** during cold weather.

L. Gloves (inner)

1. The **CONTRACTOR** shall supply Latex or equivalent surgical gloves to be worn inside the outer gloves.

M. Boots (inner)

1. The **CONTRACTOR** shall supply one pair of safety shoes or boots per workman and shall be of the safety-toe type meeting the requirements of 29 CFR 1910.136.

N. Boots (outer)

1. The **CONTRACTOR** shall provide and maintain one pair of overshoes for the on-site person entering a hazardous work area. The overshoes shall be constructed of rubber and shall be 12 inches high minimum.

PERSONAL PROTECTIVE EQUIPMENT SPECIFICATIONS								
Description	Manufacturer	Model Number	Size	Comments				
Tyvek coveralls	Kappler/Abanda	1427/1428	xl/lg	NA				
Saranex coveralls	Kappler/Abanda	77427/77428/77434	xl/lg	NA				
Sijal acid suit	Chemtex Bata	91522-G	xl/lg	NA				
Surgical gloves	Best	7005	xl/lg	NA				
Neoprene gloves	Edmont	8-354	xl/lg	NA				
Nitrile gloves	Granet	1711	10	NA				
Butyl gloves	North	B-161	10	NA				
Viton gloves	North	F-124	10/11	NA				
Long gauntlet neoprene	Edmont	19-938	xl	NA				
Cotton work gloves	North	Grip-N/K511M	men's	or equal				
Latex booties	Rainfair	1250-Y	xl	NA				
PAPR pesticide cartridges	Racal	AP-3	NA	NA				
PAPR asbestos cartridges	Racal	SP-3	NA	NA				
APR organic cartridges	MSA	GMC-H	NA	NA				
APR asbestos cartridges	MSA	Туре Н	NA	NA				
APR pesticide cartridges	MSA	GMP	NA	NA				

1.13 Personnel Hygiene and Decontamination

A. On-Site Hygiene Facility

- 1. The **CONTRACTOR** shall provide a hygiene facility on site. The hygiene facility shall include the following:
 - Adequate lighting and heat;
 - Shower facilities for project personnel;
 - Laundry facilities for washing work clothes and towels;
 - Areas for changing into and out of work clothing. Work clothing should be stored separately from street clothing;
 - Clean and "dirty" locker facilities; and

Storage area for work clothing, etc.

a. Portable "Boot Wash" Decontamination Equipment

1. The **CONTRACTOR** shall provide a portable decontamination station, commonly referred to as a "Boot Wash" facility for each hazardous work zone requiring decontamination for project personnel. These facilities shall be constructed to contain spent wash water, contain a reservoir of clean wash water, a power supply to operate a pump for the wash water, a separate entrance and exit to the decontamination platform, with the equipment being mobile, allowing easy transport from one hazardous work zone to the next. All such wash water shall be disposed of at the dewatering facility. An appropriate detergent such as trisodium phosphate shall be used.

b. Personnel Decontamination

1. The **CONTRACTOR** shall provide full decontamination facilities at all hazardous zones. Decontamination facilities must be described in detail in the HASP.

c. Disposal of Spent Clothing and Material

- 1. Contaminated clothing, used respirator cartridges and other disposable items will be put into drums/containers for transport and proper disposal in accordance with TSCA and RCRA requirements.
- 2. Containers/55-gallon capacity drums shall conform to the requirements of 40 CFR Part 178 for Transportation of Hazardous Materials. The containers/drums containing excavated and other hazardous material shall be transported by the **CONTRACTOR** to the staging area.
- 3. The **CONTRACTOR** is responsible for the proper container packaging, labeling, transporting, and disposal.

1.14 Equipment Decontamination

A. General

1. All equipment and material used in this project shall be thoroughly washed down in accordance with established federal and state procedures before it is removed from the project. With the exception of the excavated materials, all other contaminated debris, clothing, etc. that cannot be decontaminated shall be disposed at the **CONTRACTOR's** expense by a method permitted by appropriate regulatory agencies. The cost for this element of work shall be incorporated in the lump sum bid for mobilization/demobilization the unit prices bid for disposal of decontamination liquids or as otherwise directed on this project. All vehicles and equipment used in the "Dirty Area" will be decontaminated to the satisfaction of the SO in the decontamination area on site prior to leaving the project. The **CONTRACTOR** will certify, in writing, that each piece of equipment has been decontaminated prior to removal from the site.

- 2. Decontamination shall take place within the designated equipment and materials decontamination area. The decontamination shall consist of degreasing (if required), followed by high-pressure, hot-water cleaning, supplemented by detergents as appropriate. Wash units shall be portable, high-pressure with a self-contained water storage tank and pressurizing system (as required). Each unit shall be capable of heating wash waters to 180 degrees Fahrenheit and providing a nozzle pressure of 150 psi.
- 3. Personnel engaged in vehicle decontamination will wear protective clothing and equipment as determined in the HASP. If the **CONTRACTOR** cannot or does not satisfactorily decontaminate his tools or equipment at the completion of the project, the **CONTRACTOR** will dispose of any equipment which cannot be decontaminated satisfactorily and will bear the cost of such tools and equipment and its disposal without any liability to the **ENGINEER**. At the completion of the project the **CONTRACTOR** shall completely decontaminate and clean the decontamination area.

B. Decontamination Station

- 1. The **CONTRACTOR** shall construct a decontamination station as described. The decontamination station shall be located in the Contamination Reduction Zone and shall be used to clean all vehicles leaving the Exclusion Zone prior to entering the Support Zone or leaving the site.
- 2. Each decontamination pad will be equipped with a drain system and holding tank on a properly graded area that has no deleterious material. The **CONTRACTOR** shall obtain and analyze one soil sample at the area where the decontamination pad is to be built and one soil sample after the pad has been dismantled, as directed by the Engineer. The cost associated with the samples shall be included in the cost of providing health and safety at the site.
- 3. Shop drawings of the decontamination pad shall be submitted to the **ENGINEER** for approval.
- 4. The **CONTRACTOR** shall be responsible for the provision of an adequately equipped decontamination pad which shall meet the following requirements:
 - a. Adequate dimensions to contain wash water and debris from the largest sized vehicles to be utilized in this contract. All vehicles and construction equipment leaving a contaminated zone shall be decontaminated.
 - b. Perimeter to be curbed and provided with splash guards.
 - c. 40 mil impervious HDPE membrane is required to prevent seepage into the ground.
 - d. Sumps, pumping facilities, and temporary storage facilities to be adequate for anticipated use.
 - e. Temporary storage facility may be mobile tankers or suitable fixed tanks. Fixed tanks shall be located within secondary containment areas capable of containing 100% of the tank capacity, or 110% of the largest tank where the secondary containment area holds more than one tank. The secondary containment area shall have a permeability of not more than 1.0 x 10⁻⁷ cm/sec.
 - f. The decontamination pad is to be located at the exit of each contaminated zone such that previously non-contaminated areas are not contaminated during

- remedial activities. This may require the construction and use of multiple decontamination pads.
- g. The **CONTRACTOR** shall place a minimum of six (6) inches of sand under the decontamination pad.
- h. There shall be side wall panels, six (6) feet high minimum on two sides to prevent over spray.
- C. The **CONTRACTOR** shall clean the decontamination pad after daily use. No contamination shall be left behind. The **CONTRACTOR** will be required to dismantle, remove and properly dispose of the pad at their own expense.

1.15 Air Monitoring Program

A. General

- 1. The **CONTRACTOR** shall develop, as part of the HASP, an air monitoring program (AMP). The purpose of the AMP is to determine that the proper level of personnel protective equipment is used, to document that the level of worker protection is adequate, and to assess the migration of contaminants to off-site receptors as a result of site work.
- 2. The **CONTRACTOR** shall supply all personnel, equipment, facilities, and supplies to develop and implement the air monitoring program described in this section. Equipment shall include at a minimum real-time aerosol monitors, depending on work activities and environmental conditions.
- 3. The **CONTRACTOR's** AMP shall include both real-time and documentation air monitoring (personal and area sampling as needed). The purpose of real-time monitoring will be to determine if an upgrade (or downgrade) of PPE is required while performing on-site work and to implement engineering controls, protocols, or emergency procedures if **CONTRACTOR**-established action levels are encountered.
- 4. The **CONTRACTOR** shall also use documentation monitoring to ensure that adequate PPE is being used and to determine if engineering controls are mitigating the migration of contamination to off-site receptors. Documentation monitoring shall include the collection and analysis of samples for total nuisance dust.
- 5. To protect the public in the neighboring residential neighborhood, the **CONTRACTOR** must include in the AMP provisions for suspending work and implementing engineering controls based upon detectable odors, as well as upon instrument monitoring results.
- 6. During the progress of active remedial work, the **CONTRACTOR** will monitor the quality of the air in and around each active hazardous operation with real-time instrumentation prior to personnel entering these areas. Sampling at the hazardous work site will be conducted on a continuous basis. Any departures from general background will be reported to the SO prior to entering the area. The SO will determine when and if operations should be shut down.

- 7. Air monitoring (both real time and documentation monitoring) shall be conducted by a minimum of one dedicated person with communication to the foreman whenever intrusive activities (such as excavation, tank removal, and soil treatment) are performed in an exclusion zone. After completion of intrusive activities involving contaminated materials and removal of the exclusion zone, air monitoring may be discontinued.
- 8. Air monitoring equipment will be operated by personnel trained in the use of the specific equipment provided and will be under the control of the SO. A log of the location, time, type and value of each reading and/or sampling will be maintained. Copies of log sheets will be provided on a daily basis to the **ENGINEER's** on-site representative.

B. Action Levels

1. <u>VOC Monitoring, Response Levels, and Actions</u>

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- a. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- b. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- c. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
- d. All 15-minute readings must be recorded and be available for State (DEPARTMENT and New York State Department of Health (NYSDOH)) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

2. Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance

of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- a. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m3 above the upwind level and provided that no visible dust is migrating from the work area.
- b. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m3 of the upwind level and in preventing visible dust migration.
- c. All readings must be recorded and be available for State (DEPARTMENT and NYSDOH) and County Health personnel to review.

C. Real-Time Monitoring

- 1. The **CONTRACTOR** shall submit a written copy of the real time air monitoring results for each Workday, by 10:00 a.m. the following Workday, which shall include an appropriately scaled map of the Work area depicting sample locations, wind direction and other pertinent meteorological data: date; time; analytical results; applicable standards and engineering controls implemented (if necessary).
- 2. Real-time monitoring shall be conducted using the following equipment:
- 3. Organic vapor photoionizers shall be Photovac TIP, total organic vapor analyzer as manufactured by Photovac International, 739B Park Avenue, Huntington, New York 11743 or equal. The **CONTRACTOR** shall provide one Photovac TIP for each and every hazardous work zone operation.
- 4. Particulate monitoring must be performed using real-time particulate monitors (MiniRam Model MIEPDM-3, or equal) and shall monitor particulate matter in the range of 0-10 microns diameter (PM₁₀) with the following minimum performance standards:

Object to be measured: Dust, Mists, Aerosols

Measurement Ranges: 0.001 to 400 mg/m^3 (1 to $400,000 \text{ µg/m}^3$)

Precision (2-sigma) at constant temperature:

+/- $10 \mu g/m^3$ for one second averaging; +/- $1.5 \mu g/m^3$ for sixty second averaging

Accuracy:

+/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 μ m, g= 2.5, as aerosolized)

Resolution: 0.1% of reading or 1 µg/m³, whichever is larger

Particle Size Range of Maximum Response: 0.1-10 μ

Total Number of Data Points in Memory: 10,000

Logged Data:

Each Data Point: average concentration, time/date, and data point number Run Summary:

overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number.

Alarm Averaging Time (user selectable):

real-time (1-60 seconds) or STEL (15 minutes)

Operating Time: 48 hours (fully charged NiMH battery); continuously with charger Operating Temperature: -10 to 50°C (14 to 122°F)

Automatic alarms are suggested.

- 5. Particulate levels will be monitored and integrated over a period not to exceed 15 minutes. Consequently, instrumentation shall require necessary averaging hardware to accomplish this task. A monitor such as the personal DataRAM, manufactured by Monitoring Instruments for the Environment, Inc., or equivalent, can be used as a real time particulate screening tool. Although the instrument's design does not allow it to make a sharp differentiation of particulates at the PM₁₀ standard, the instrument could be used in the passive mode without a pump to provide readings in the 0.1 to 10μ range in the immediate vicinity of construction activities.
- 6. Monitor the air, using the same equipment, for 10-15 minutes upwind of the work site to establish background level. The background level shall be established before the start of each shift every day. In the event that downwind particulates are detected at levels in excess of 150 ug/m³ or 2.5 times the established background level at the work site, re-measure the background concentrations upwind of the work zone using the same equipment. If the measured particulate level at the work zone is 100 ug/m³ above background, monitor the downwind site perimeter and implement additional dust controls in the work zone. Continue to take hourly measurements of the upwind background concentrations and compare such concentrations with the particulate level at the work zone, until the downwind level at the work zone is less than 100 ug/m³ above the upwind level. If at any time the measured particulate level at the work zone is more than 150 ug/m³ over background concentration, the CONTRACTOR shall immediately suspend work at the site, promptly notify the Safety Officer, and implement suitable corrective action or engineering controls before work resumes.
- 7. Real-time monitoring will be conducted at any excavation of contaminated soil or sediments. Real-time monitoring will also be conducted at perimeter locations including an upwind (background) and three downwind locations. A background reading will be established daily at the beginning of the work shift. If the wind direction changes during the course of the day, a new background reading will be made. Downwind readings at the perimeter will be made when **CONTRACTOR** action levels have been exceeded at the excavation face or at a minimum of twice a day.
- 8. If action levels are exceeded at the perimeter location for fugitive dust, work must be suspended and engineering controls must be implemented to bring concentrations back down to acceptable levels.
- 9. Construction activities generate dust which could potentially transport contaminants off site. There may be situations when visible dust is being generated and leaving the site and the monitoring equipment does not measure PM₁₀ at or above the action level. Therefore, if dust is observed leaving the working site, additional dust suppression techniques must be employed by the **CONTRACTOR**.

D. Documentation Monitoring

- 1. Documentation monitoring will be conducted at the perimeter at a minimum of four locations (one upwind and three downwind) for total dust. Documentation monitoring will be conducted only during excavation, consolidation, staging, removal, or decontamination activities (i.e., intrusive activities).
 - a. Collect total nuisance dust using PVC collection filter and personnel sampling pump and analyze gravimetrically according to NIOSH 89-127 Method 0500.
 - b. Documentation samples will be collected at established perimeter locations. The four locations will be chosen according to site activities and expected wind direction.
 - c. The perimeter locations will be established and marked with high visibility paint or flagging at approximately equidistant points around the site. Samples will be collected at a height of 6 feet above ground surface.
 - d. Documentation samples will be collected continuously, during the normal work hours when activities are occurring on site. At the end of the week, one days worth of sampling (i.e. three downwind locations and one upwind location) will be selected by the Engineer for analysis by the Contractor.
 - e. The documentation samples will be collected over an eight (8) hour work period.
 - f.. In addition to perimeter monitoring, personnel documentation samples will be collected on site once a week. On-site samples will be collected by choosing "high risk" workers to wear appropriate collection media for pesticides, metals, and particulate. "High risk" workers are those who are most likely to encounter contamination on a particular task. At a minimum, two high risk workers will be chosen to wear collection media for a particular day each week and the media will be analyzed with the documentation air monitoring samples.
 - g. The **CONTRACTOR** shall submit a written copy of the documentation air monitoring results within 7 days of sampling, which shall include an appropriately scaled map of the Work area depicting sample locations, wind direction and other pertinent meteorological data: date; time; analytical results; applicable standards and engineering controls implemented (if necessary).
 - h. The documentation sampling submitted shall also identify the "high risk" workers chosen to wear appropriate collection media for contaminants; date media was worn; task involved; analytical results and applicable standards.
 - i. Payment for air monitoring will not be approved until the above submittals have been received and approved by the **ENGINEER**.

E. Community Air Monitoring

1. Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion

zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEPARTMENT/NYSDOH staff.

- a. **Continuous monitoring** will be required for all <u>ground intrusive</u> activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.
- b. **Periodic monitoring** for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or Final DER-10 Page 205 of 226 Technical Guidance for Site Investigation and Remediation May 2010 overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

1.16 Emergency Equipment and First Aid Requirements

A. Communications

- 1. The **CONTRACTOR** shall provide telephone communication at the site field office. Emergency numbers, such as police, sheriff, fire, ambulance, hospital, poison control, DEPARTMENT, EPA, NYSDOH, and utilities, applicable to this site shall be prominently posted near the telephone.
- 2. The **CONTRACTOR** shall establish a signaling system for emergency purposes.

B. Emergency Shower and Emergency Eye Wash

1. The **CONTRACTOR** shall supply and maintain one portable eyewash/body wash facility per active hazardous work zone. The facility shall have a minimum water capacity of 10 gallons and shall conform to OSHA regulations 29 CFR 1910.151. The portable eyewash/body wash facility shall be manufactured/ supplied by Direct Safety Company, Lab Safety Supply Company, or other appropriate suppliers.

C. Fire Extinguishers

1. The **CONTRACTOR** shall supply and maintain at least one fire extinguisher in the **CONTRACTOR's** office and one at each hazardous work zone. The fire extinguisher shall be a 20-pound Class ABC dry fire extinguisher with UL-approval per OSHA Safety and Health Training Standards 29 CFR 1910.157. The fire extinguisher shall be manufactured/supplied by Direct Safety Company, Lab Safety Supply Company, or other appropriate suppliers.

D. First Aid Kit

1. The **CONTRACTOR** shall supply and locate in his project office and at each and every hazardous work zone one 24-unit (minimum size) "industrial" or "Contractor" first aid kit, required by OSHA requirements 29 CFR 1910.151. The first aid kit shall be manufactured/supplied by Norton, Scott, or other appropriate suppliers.

E. Emergency Inventory

- 1. In addition to those items specified elsewhere, the SO will maintain the following inventory of equipment and protective clothing for use at the site in the event of emergencies.
 - a. Washable coveralls;
 - b. Gloves (outer);
 - c. Gloves (inner);
 - d. SCBA;
 - e. Escape SCBA (authorized visitor use);
 - f. Face shields;
 - g. Safety glasses;
 - h. Respirators and appropriate cartridges;
 - i. Disposable coveralls;
 - j. Chemical-resistant boots and latex boot covers;
 - k. Hard hats;
 - 1. Bottled breathing air; and
 - m. Rain suits.

1.17 Emergency Responses/contingency Plan and Procedures

A. Daily Work

1. During the progress of work, the **CONTRACTOR** will monitor the quality of the air in and around each active hazardous operation prior to personnel entering these areas. Sampling shall be conducted on a continuous basis. Based on the air monitoring data, the proper level of protection will be chosen by the SO.

B. Emergency Vehicle Access

1. In the event that emergency services vehicles (police, fire, ambulance) need access to a location which is blocked by the working crew operations, those operations (equipment, materials, etc.) will be immediately moved to allow those vehicles access. Emergency crews will be briefed as to site conditions and hazards by the SO. All vehicles and personnel will be decontaminated prior to leaving the site.

2. The **CONTRACTOR** shall schedule a site briefing with the local Fire Department at the completion of mobilization to familiarize emergency response personnel with his operations and site layout.

C. Personal Injury Response Plan

- 1. In cases of personal injuries, the injured person or the crew personnel in charge will notify the SO. The SO will assess the seriousness of the injury, give first aid treatment if advisable, consult by telephone with a physician if necessary, and arrange for hospitalization if required. The SO will arrange for an ambulance if required.
- 2. If soiled clothing cannot be removed, the injured person will be wrapped in blankets for transportation to the hospital.
- 3. Personnel, including unauthorized personnel, having skin contact with chemically contaminated liquids or soils shall be flushed with water after any wet or soiled clothing has been removed.
- 4. These personnel should be observed by the SO to ascertain whether there are any symptoms resulting from the exposure. If there is any visible manifestation of exposure such as skin irritation, the project personnel will refer to a consulting physician to determine whether the symptoms were the result of a delayed or acute exposure, a secondary response to exposure such as skin infection, or occupational dermatitis. All episodes of obvious chemical contamination will be reviewed by the SO in order to determine whether changes are needed in work procedures.

D. Route to the Hospital

1. The **CONTRACTOR** shall post in conspicuous places in the Support Zone a map with written directions to the nearest hospital or emergency medical treatment facility.

E. Fire Service

- 1. The **CONTRACTOR** will make arrangements to take immediate fire fighting and fire protection measures with the local Fire Chief. If there is a fire, the crewmen or their person in charge will immediately call the SO. The SO will immediately call the fire personnel.
- 2. The air downwind from any fire or explosion will be monitored immediately in order to protect workers and the nearby community. If personal injuries result from any fire or explosion, the procedures outlined in the Personal Injury Response Plan are to be followed.

F. Master Telephone List

1. The attached master telephone list will be completed and prominently posted at the field office. The list will have telephone numbers of all project personnel, emergency services including hospital, fire, police, and utilities. In addition, two copies with telephone numbers are to be given to the **DEPARTMENT** for emergency reference purposes.

Emergency Service		Telephone Number
Fire Department		911
Police Department	Police Department	
Ambulance		911
Hospital/Emergency Care Facil	ity	To be determined
Poison Control Center		(800) 336-6997
Chemical Emergency Advice (CHEMTREC)	.	
NYSDEC Albany Office	Work Hours After Hours	To be determined To be determined
NYSDEC Regional Office	Work Hours	To be determined
County Dept. of Health		To be determined
New York State Dept. of Health	ı - Albany	To be determined
lew York State Dept. of Health - Regional		To be determined

1.18 Heat Stress Monitoring

- **A.** Site personnel who wear protective clothing allow body heat to be accumulated with an elevation of the body temperature. Heat cramps, heat exhaustion, and heat stroke can be experienced, which, if not remedied, can threaten life or health. Therefore, an American Red Cross Standard First Aid
 - book or equivalent will be maintained on site at all times so that the SO and site personnel will be able to recognize symptoms of heat emergencies and be capable of controlling the problem.
- **B.** When protective clothing is worn, especially Levels A and B, the suggested guidelines for ambient temperature and maximum wearing time per excursion are:

Ambient Temperature (°F)	Maximum Wearing Time Per Excursion (Minutes)	
Above 90	15	
85 to 90	30	
80 to 85	60	
70 to 80	90	
60 to 70	120	
50 to 60	180	

- C. One method of measuring the effectiveness of employees' rest-recovery regime is by monitoring the heart rate. The "Brouha guideline" is one such method:
 - During a 3-minute period, count the pulse rate for the last 30 seconds of the first minute, the last 30 seconds of the second minute, and the last 30 seconds of the third minute.
 - Double the count.
- **D.** If the recovery pulse rate during the last 30 seconds of the first minute is at 110 beats/minute or less and the deceleration between the first, second, and third minutes is at least 10 beats/minute, the work-recovery regime is acceptable. If the employee's rate is above that specified, a longer rest period is required, accompanied by an increased intake of fluids.
- **E.** In the case of heat cramps or heat exhaustion, "Gatorade" or its equivalent is suggested as part of the treatment regime. The reason for this type of liquid refreshment is that such beverages will return much-needed electrolytes to the system. Without these electrolytes, body systems cannot function properly, thereby increasing the represented health hazard.
- F. This liquid refreshment will be stored in a cooler at the edge of the decontamination zone in plastic squeeze bottles. The plastic bottles will be marked with individual's names.

 Disposable cups with lids and straws may be used in place of the squeeze bottles. Prior to drinking within the decontamination zone, the project personnel shall follow the following decontamination procedures:

- 1. Personnel shall wash and rinse their outer gloves and remove them.
- 2. Personnel shall remove their hard hats and respirators and place on table.
- 3. Personnel shall remove their inner gloves and place them on table.
- 4. Personnel shall wash and rinse their face and hands.
- 5. Personnel shall carefully remove their personal bottle or cup from the cooler to ensure that their outer clothes do not touch any bottles, cups, etc.
- 6. The used bottle or cups will not be returned to the cooler, but will be placed in a receptacle or container to be cleaned or disposed of.
- 7. Personnel shall replace their respirators, hard hats, gloves and tape gloves prior to re-entering the hazardous zone.
- **G.** When personnel are working in situations where the ambient temperatures and humidity are high-and especially in situations where protection Levels A, B, and C are required--the SO must:
 - Assure that all employees drink plenty of fluids ("Gatorade" or its equivalent);
 - Assure that frequent breaks are scheduled so overheating does not occur; and
 - Revise work schedules, when necessary, to take advantage of the cooler parts of the day (i.e., 5:00 a.m. to 1:00 p.m., and 6:00 p.m. to nightfall).

1.19 Cold Stress

- **A.** Whole-body protection shall be provided to all site personnel that have prolonged exposure to cold air. The right kind of protective clothing shall be provided to site personnel to prevent cold stress. The following dry clothing shall be provided by the **CONTRACTOR** as deemed necessary by the SO:
 - Appropriate underclothing (wool or other);
 - Outer coats that repel wind and moisture;
 - Face, head, and ear coverings;
 - Extra pair of socks;
 - Insulated safety boots; and
 - Glove liners (wool) or wind- and water-repellant gloves.
- **B.** The SO will use the equivalent chill temperature when determining the combined cooling effect of wind and low temperatures on exposed skin or when determining clothing insulation requirements.

C. Site personnel working continuously in the cold are required to warm themselves on a regular basis in the on-site hygiene facility. Warm, sweet drinks will also be provided to site personnel to prevent dehydration. The SO shall follow the work practices and recommendations for cold stress threshold limit values as stated by the 1991-1992 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices by the American Conference of Governmental Industrial Hygienists or equivalent cold stress prevention methods.

1.20 Logs, Reports and Record Keeping

A. Security Log

- 1. A daily log of security incidents and visitors granted access to the site will be maintained, as well as a log of all personnel entering and exiting the site.
- 2. All approved visitors to the site will be briefed by the SO on safety and security, provided with temporary identification and safety equipment, and escorted throughout their visit. Site visitors will not be permitted to enter a hazardous work zone.
- 3. Project site shall be posted, "Warning: Hazardous Work Area, Do Not Enter Unless Authorized," and access restricted by the use of a snow fence.

B. Safety Log

- 1. The **CONTRACTOR's** SO will maintain a bound safety logbook. The log will include all health and safety matters on site and include, but not be limited to, the following information:
- Date and weather conditions on site;
- A description of the proposed work for the day;
- Times when site personnel arrive and depart:
- Air monitoring data;
- Heat and/or cold stress monitoring;
- Decontamination procedures:
- Type and calibration of air sampling/monitoring equipment used;
- · Safety meeting summaries; and
- Accidents.

C. Emergency Or Accident Report

1. Any emergency or accident will be reported immediately to the SO. The ENGINEER will also be notified. The CONTRACTOR will submit a written report immediately, but no later than 24 hours of its concurrence. The report will include, but not be limited to, the nature of the problem, time, location, areas affected, manner and methods used to control the emergency, sampling and/or monitoring data, impact, if any, to the surrounding community, and corrective actions the CONTRACTOR will institute to minimize future occurrences. All spills will be treated as emergencies.

D. Daily Work Report

- 1. The **CONTRACTOR** shall maintain a daily work report that summarizes the following:
 - Work performed,
 - Level of protection,
 - Air monitoring results,
 - Safety-related problems, and
 - Corrective actions implemented.

1.21 Posting Regulations

- **A.** The **CONTRACTOR** will post signs at the perimeter of the Exclusion Zone that state "Warning, Hazardous Work Area, Do Not Enter Unless Authorized." In addition, a notice directing visitors to sign in will be posted at the project site. Also, the **CONTRACTOR** will post a sign stating that any questions about the site should be directed to the New York State Department of Environmental Conservation
- **B.** Safety regulations and safety reminders will be posted at conspicuous locations throughout the project area. The following safety regulations and safety reminders are at a minimum to be posted around the job site:

SAFETY REGULATIONS

(To be Posted for Project Personnel)

The main safety emphasis is on preventing personal **contact** with gases, soils, sludge and water. Towards that end, the following rules have been established.

Regulations

- A. Eating, drinking and smoking on the site is PROHIBITED except in specifically designated areas.
- B. All project personnel on the site must wear clean or new gloves daily.
- C. If you get wet to the skin, you must wash the affected area with soap and water immediately. If clothes in touch with the skin are wet, these must be changed.
- D. You must wash your hands and face before eating, drinking or smoking.
- E. Observe regulations on washing and removing boots before entering the dressing room or a clean area and showering before going home.

Recommendations

- A. Do not smoke on site with dirty hands; better yet, do not smoke.
- B. Check for any personal habit which could get soil or water into your body.
 - Examples: food off your fingers, wiping your face or nose with a dirty hand or running a dirty hand through your hair.
- C. Check that any regularly worn clothing is clean. Examples include dirty watchbands, neck chains and a dirty liner on your safety helmet. Safety practices with poisonous chemicals can be summed up with a few words:

Don't breathe in chemical odors and don't touch the water, soil, and sludge.

If you do get dirty or wet, clean up as soon as possible.

SAFETY REMINDER FOR TOXIC CHEMICALS

(Post for Project Personnel)

Chemicals can't cause problems unless you breathe them, eat them, or put them on your skin.

Chemicals in Gases, Soils, Sludge, and Water

Don't let them go into your mouth, nose, or stay on your skin.

Use common personal hygiene.

- A. Don't eat or drink on the site.
- B. No smoking in the area of work.
- C. Wear protective clothing.
- D. Glove liners must be clean.
- E. Wash your hands whenever practical. Wash before eating, drinking, or smoking.
- F. Don't carry chemicals home to your family. (For example, on clothing, mud in the car, dirty hands.)
- G. Follow strictly the HASP.

1.22 Community Protection Plan

A. General

1. Develop, as part of this HASP, a Community Protection Plan (CPP). The CPP shall outline those steps to be implemented to protect the health and safety of surrounding human population and the environment.

B. Air Monitoring

- 1. As part of the Air Monitoring Program, use real-time monitoring and documentation sampling as described in the Subpart "Air Monitoring Program" of this section to determine if off-site emission, as a result of site work, poses a threat to the surrounding community.
- 2. Provide real-time air monitoring for volatile compounds and particulate levels as the perimeter of the work area as necessary. Include the following:
 - a. Volatile organic compounds must be monitored at the downwind perimeter of the work area on a continuous basis. If total organic vapor levels exceed 5 ppm above background, work activities shall be halted and monitoring continued under the provisions of a Vapor Emission Response Plan. All readings shall be recorded and be available for State (DEC & DOH) personnel to review.
 - b. Particulates shall be continuously monitored at the 4 documentation sampling stations for a total of 4 dust monitors. If the downwind particulate level is 150 ug/m³ greater than the upwind particulate level, dust suppression techniques shall be employed. All readings shall be recorded and be available for State (DEC & DOH) personnel to review.

C. Vapor Emission Response Plan

- 1. If the ambient air concentration of organic vapors exceed 5 ppm above background at the perimter of the work area, activities shall be halted and monitoring continued. If the organic vapor level decreases below 5 ppm above background, work activities may resume. If the organic vapor levels are greater than 5 ppm over background but less than 225 ppm over background at the perimeter of the work area, activities may resume provided the organic vapor level 200 feet downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm over background.
- 2. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities shall be shutdown. When work shutdown occurs, downwind air monitoring as directed by the SO shall be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section.

D. Major Vapor Emission

1. If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work area or half the distance to the nearest residential or commercial property, whichever is less, all work activities shall be halted.

- 2. If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the work area, the air quality shall be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).
- 3. If efforts to abate the emission source are unsuccessful and if organic vapor levels are approaching 5 ppm above background and persist for more than 30 minutes in the 20 Foot Zone, the Major Vapor Emission Response Plan shall automatically be placed into effect.
- 4. However, the Major Vapor Emission Response Plan shall be immediately placed into effect if organic vapor levels are greater than 10 ppm above background levels.

E. Major Vapor Emission Response Plan

- 1. Upon activation, the following shall be undertaken:
 - a. All Emergency Response Contracts as listed in the Subpart titled "Emergency Response and Contingency Plan" paragraph titled "Telephone List."
 - b. The local police authorities shall immediately be contacted by the SO and advised of the situation. Coordinate with local officials to arrange for notification and evacuation of the surrounding community.
 - c. Frequent air monitoring shall be conducted at 30 minutes intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring say be halted or modified by the SO.
- 2. The Air Monitoring Program shall include real-time air monitoring and shall be conducted at the perimeter of the site. Particulates should be continuously monitored upwind, downwind and within the Exclusion Zone at temporary particulate monitoring stations. If the downwind particulate level is more than 2.5 times greater than the upwind particulate level and greater than 150 ug/m³, then dust suppression techniques shall be employed. This is a general action level. A site-specific action level shall be developed based on available analytical data. All readings shall be recorded and be available for ENGINEER, DEPARTMENT, and NYSDOH personnel to review.
- 3. Coordinate with local officials to arrange for notification and evacuation of the surrounding community in the event that off-site emissions pose a threat.

F. Odor

 Foam active work areas to reduce odors if odor complaints are received from nearby residences during site activities. Odor masking agents or other odor control methods may be used subject to ENGINEER's review. Continue odor suppression during each day that odor complaints are received.

G. Off-Site Spill Response

1. Produce as part of the HASP a Spill Response Plan, also coordinated with local officials, in case of an off-site spill of either liquid or solid wastes. The plan shall include transportation routes and times, as well as the minimum requirements set forth in the Subpart titled "On-Site Spill Containment Plan." The driver shall be supplied with Material Safety Data Sheets (MSDSs), a 24-hour emergency phone number, and instructions for reporting emergencies to local agencies and the project site.

1.23 Confined Space Work

- **A.** Evaluate the work areas and determine if there are any permit-required confined spaces. If the **CONTRACTOR** determines that personnel will not need to enter a permit-required confined space, appropriate measures to prevent personnel from entering such shall be taken. If the **CONTRACTOR** determines that personnel will need to enter a permit-required confined space, develop and implement a written permit-required confined space program.
- **B.** The written program shall comply with 29 CFR 1910.146 and shall include the following:
 - 1. Implement methods to prevent unauthorized entry;
 - 2. Identify and evaluate the hazards of permit-required confined spaces before personnel entry;
 - 3. Develop and implement procedures for safe permit-required confined space entry;
 - 4. Provide the appropriate equipment to evaluate permit-required confined spaces;
 - 5. Evaluate permit-required confined spaces when entry operations are conducted;
 - 6. Provide at least one attendant outside the permit-required confined space which will be entered;
 - 7. Designate the personnel who will have active roles in entry operations;
 - 8. Develop and implement procedures for obtaining rescue and emergency services;
 - 9. Develop and implement a system for the preparation, issuance, use, and collection of entry permits:
 - 10. Develop and implement procedures to coordinate entry operations when personnel from more than one employer are working;
 - 11. Develop and implement procedures for concluding the entry;
 - 12. Review and revise entry operations if measures may not protect personnel; and
 - 13. Review the permit-required confined space program to ensure personnel are protected from the hazards present.
- **C.** Copes of the permit-required confined space program and employee training certificates shall be included with the HASP.

2. PRODUCTS

Not Used.

3. EXECUTION

Not Used.

* END OF SECTION *

SECTION XI

Supplementary Specifications

06/06 XI-1

SECTION XI

Supplementary Specifications

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SECTION 00015

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SECTION 00330

EXISTING CONDITIONS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Subsurface explorations have been conducted for the sole purpose of assisting the Department and the Engineer in the evaluation of the extent of on-site contamination and limit of waste. A summary of this data is included in the Limited Site Data document.
- B. Analytical testing of soil and water samples collected at the Site have been performed for the sole purpose of assisting the Department and the Engineer in the evaluation of the type, concentrations, and extent of contamination present at the Site. Summary data for the laboratory testing is included in the Limited Site Data document.
- C. Existing surface features for the Site were mapped by the Popli Design Group in 2009 using field surveying techniques. The existing conditions depicted on the Construction Contract Drawings are based on this survey and the resulting work product entitled "Boundary & Topographic Map, prepared for the New York State D.E.C., Former South Hill Dump Site, Being part of Lot #100, Town of Cortlandville, County of Cortland, State of New York," by the Popli Design Group, dated January 20, 2010.
- D. Existing known utilities are shown on the Construction Contract Drawings. Utilities are shown diagrammatically and should be considered incomplete. Identified utilities that are part of the Work or within the limit of work include the following:
 - 1. An existing stormdrain culvert is located beneath South Hill Road that conveys stormwater runoff flows from the field to the north of the Site to an existing drainage swale on the Site.
 - 2. Underground telephone is buried within the South Hill Road right-of-way along the Site's road frontage.

1.02 LIMITATIONS OF SUBSURFACE EXPLORATIONS

- A. Explorations are not intended to indicate subsurface conditions except at the locations of the borings and test pits and are based on the information available and the Engineer's interpretations at the time borings were made.
- B. Explorations were not made for the purposes of determining or facilitating the constructability of the project or the cost thereof. Therefore, they may not be suitable or adequate for any purpose other than for the Engineer's use in designing the project.
- C. Any reuse of the exploration logs or other subsurface information, including, without limitation, any subsurface investigation prepared on behalf of the Department, by the Contractor or its subcontractors, regardless of tiers, shall be at its own risk and without legal liability on the Engineer or Department. Therefore, the Contractor shall indemnify and hold

the Engineer and Department harmless from all claims, damages, expenses, or costs resulting from the Contractor's interpretation of this information.

1.03 LIMITATIONS OF EXISTING KNOWN UTILITIES

A. It should not be inferred that utility locations shown on the Construction Contract Drawings are precise, or that all existing utilities or structures are depicted.

PART 2 - PRODUCTS

Not Applicable

PART 3- EXECUTION

3.01 SUPPLEMENTAL SUBSURFACE INVESTIGATION

- A. The Contractor shall review the available subsurface information and conduct additional explorations and investigations as deemed necessary to develop independent soil parameters for the purposes of shoring design, slope stability, and constructability.
- B. Additional test borings and other exploratory operations may be made by Contractor at no cost to Department with the following exceptions:
 - 1. Boreholes shall be performed by the Contractor to construct groundwater monitoring wells as described in Section 02522 Groundwater Monitoring Wells.

3.02 SUPPLEMENTAL UTILITY LOCATION AND RESPONSIBILITY

- A. The Contractor shall locate or have located all existing utilities or underground structures in the vicinity of the limit of work on the Site.
- B. All utilities shall be identified and marked in the field in accordance with required New York regulations. The Contractor shall contact Dig Safely New York (811 or 1-800-962-7962) prior to commencing any on-site excavation.
- C. The Contractor shall be responsible for any and all work-related damage to any existing utilities, which are not to be abandoned and are to remain in service.
- D. The Contractor shall contact the affected utility, the Department, and the Engineer as soon as any damage is discovered.
- E. The cost for performing the Work described in Sub-Part 3.02 is considered incidental to the Work.

END OF SECTION

SECTION 01045

PROJECT IDENTIFICATION AND SIGNS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The temporary project identification sign shall be 4 feet high by 8 feet wide, and constructed of 3/4- to 1-inch medium density overlay plywood, with a resin coating on both sides. The edges shall be framed with a snap trim edge cap consisting of an aluminum channel with a polyvinyl coating. An aluminum sign of equal size may also be used. The sign's background will be painted with white exterior oil base sign enamel. The fourth line will have green letters. The first, second and third lines will have blue letters. The New York State Department of Environmental Conservation (the Department) logo will be painted as noted in the attached Figure 01045-1.
- B. The permanent access control signs shall be approximately 14 inches wide by 10 inches long, and constructed of 0.040-inch thick aluminum. The sign background color shall be white with red lettering.

1.02 REFERENCES

- A. Lumber Standard: American Softwood Lumber Standard; U.S. Department of Commerce Product Standard PS20.
- B. Softwood Plywood Standard: Construction and Industrial; U.S. Department of Commercial Product Standard PS1.

1.03 QUALITY ASSURANCE

- A. Painter's Qualifications: All paint shall be applied by a professional sign painter.
- B. Aluminum signage shall be manufactured by a professional sign company.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Temporary Project Identification Sign

- 1. Posts: Standard Grade Douglas Fir, White Pine or Southern Pine; preservative treated; 4 inch x 4 inch x 12 feet long.
- 2. Plywood: Overlaid Plywood; MDO B-B EXT-APA; 3/4 to 1 inch.
- 3. Framing: Snap trim edge cap of polyvinyl coated aluminum channel.
- 3. Paint:
 - a. Background Enamel: Exterior, alkyd, glass enamel with primer as recommended by finish coat manufacturer.
 - b. Lettering and Striping Enamel: Exterior, long oil, alkyd; high gloss enamel manufactured for lettering signs.
 - c. Colors: As per attached Figure 01045-1.
- 4. Adhesives: Solvent resistant

B. Permanent Access Control Signs

- 1. Attachment Hardware: 0.50-inch minimum width adjustable stainless steel worm gear clamps with stainless steel screws.
- 2. Sign Backing: 0.040-inch thick aluminum.
- 3. Sign: vinyl sign permanently bonded to the aluminum backing and coated with a minimum 2-mil thick high-gloss UV-resistant polyester over-laminate film.
- 4. Materials: all shall be rated for outdoor use and be resistant to damage due to heat, cold, water, and UV degradation.

2.02 FABRICATION

A. Temporary Project Identification Sign

1. Painting:

- a. Paint both sides and all edges of signs with two coats of primer and one coat of background enamel.
- b. Paint lettering and striping with two coats of lettering enamel.
- c. Do not apply succeeding coat until previous coat has completely dried.
- d. Apply even coats of uniform thickness without brush marks, runs or lap marks.
- e. Lettering and striping shall be uniform with sharp, neat profiles.

B. Permanent Access Control Signs

1. Attachment Hardware:

- a. Attach two (2) stainless steel worm gear clamps to each sign, one at the top and the other at the bottom. Connect each clamp to the sign at two locations.
- b. Provide clamps of sufficient length to enclose the circumference of the selected tree to be used to post the signs.

c. Provide alternate durable hardware to connect sign placards to the chain link fence along South Hill Road.

2. Sign:

- a. Sign placard shall read "WARNING" on line one and "NO TRESPASSING" on line two or line two and three, as required.
- b. Lettering shall be a minimum 2-inch block style in red
- c. Sign placard background shall be white.

PART 3 – EXECUTION

3.01 TEMPORARY PROJECT IDENTIFICATION SIGN INSTALLATION

- A. Install signs within two weeks of Notice to Proceed.
- B. Install signs where directed by Engineer.
- C. Set posts plumb, 4 feet into the ground. Compact backfill around posts.
- D. Fasten sign, in a level position, securely to posts. The center of the sign should be located approximately 6 to 7 feet from ground level.

3.02 TEMPORARY PROJECT IDENTIFICATION SIGN MAINTENANCE AND REMOVAL

- A. Maintain the signs plumb and level for the duration of the work.
- B. When directed, at the completion of the project, remove the sign.

3.03 PERMANENT ACCESS CONTROL SIGN INSTALLATION

- A. Post signs on trees at perimeter property boundary at an approximate spacing of 75 feet apart. Coordinate locations with the surveyor-marked boundary.
- B. Attach sign placard to tree with two (2) worm gear clamps at approximately six (6) feet above ground.
- C. Attach sign placard to the chain link fence in a manner to be approved by the Engineer at an approximate height of 6 feet above ground.

END OF SECTION

FIGURE 01045-1

PROJECT SIGN

4'

SECTION 01110

SUMMARY OF WORK

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section is intended to provide a summary of the project and the various elements of work associated with it. This summary should be used in conjunction with other noted Specification Sections, the Construction Contract Drawings and other project documents included with the Contract Documents. This Section does not provide the technical detail of the referenced sections for particular work activities, but describes the work as a whole, providing an overall perspective to the separate tasks and their interrelationships.
- B. The New York State Department of Environmental Conservation (the Department) classifies the Site as a Class 2 inactive hazardous waste disposal site.
- C. The work is being performed in accordance with the Department's "Record of Decision," South Hill Dump Site, Cortlandville, Cortland, New York, Site Number 712009", Division of Environmental Remediation, dated. January 2008 (ROD). The remediation is being undertaken by the Department under the State Superfund Program.
- D. The remedial action is to construct a soil cover system over waste fill areas to prevent exposure to contaminated soils/wastes and minimize percolation of stormwater through them. The soil cover shall consist of eighteen (18) inches of clean fill and six (6) inches of topsoil. The soil cover system installed shall be vegetated, and include runoff control devices to reduce erosion potential.
- E. Management of the existing waste landfilled and stockpiled on-site includes removal of bulky wastes, tires/rims, and drums for off-site disposal; consolidation of on-site landfilled waste into a new smaller solid waste boundary that eliminates encroachment of wastes into abutting drainages; and regrading landfilled waste within the new solid waste boundary to meet maximum and minimum slope criteria.
- F. Remedial construction also includes other site and stormwater control improvements. Stormwater control improvements include re-alignment and improvement of the East Drainage Swale, installation of new perimeter drainage channels, new culverts, and a new detention basin. Other site improvements include installation of a new perimeter access road outside the footprint of the landfill, a new fence and gate along the South Hill Road frontage, and new signage along the property boundary.

1.02 DEFINITIONS

- A. Refer to Section II "Definitions" of the Contract Documents for a complete list of terms and definitions
- B. "Department" shall mean the New York Department of Environmental Conservation.

- C. "Engineer" as used in the Contract Documents shall mean MACTEC Engineering and Consulting, Inc.
- D. "Contractor" as used in these Contract Documents shall mean the successful bidder who has contracted with the Department to complete the Work.
- E. "Owner" as used in these Contract Documents shall mean the property owner, The Town of Cortlandville, New York.

1.03 WORK COVERED BY THE CONTRACT DOCUMENTS

The work shall primarily consist of, but not necessarily be limited to, the following activities:

- A. Comply with the requirements of all permits, and providing all services, utilities, equipment, and facilities required to perform the work activities in accordance with these Specifications, the Construction Contract Drawings, and the ROD.
- B. Contractor must yield to all local, state, and/or Federal government inspections without change in work schedule.
- C. In accordance with Section III of the Contract Documents, the Contractor shall submit a Construction Work Plan for review and acceptance by the Engineer and Department, which contains at a minimum:
 - 1. Site Access Control Plan including discussion of vehicle ingress/egress locations, site security, and hours of operation.
 - 2. Traffic Control Plan including discussion of estimated average and maximum daily trips generated on South Hill Road as a result of the construction and the anticipated on and off-site traffic patterns. Traffic pattern information shall state the anticipated on-site and off-site turning directions of the majority of traffic (e.g. most traffic onto the Site will be left turning from South Hill Road.)
 - 3. Proposed equipment to be used in the execution of the work.
 - 4. Proposed means and methods to be employed in execution of the work.
 - 5. Proposed sequence and duration of construction activities to be undertaken.
 - 6. Detailed description of how the Contractor proposes to maintain strict layout control to coordinate grading performance criteria with the new solid waste boundary and the required perimeter features (e.g. drainage channels, swales, and perimeter roads).
 - 7. Name and location of identified off-site Treatment, Storage and/or Disposal, Facilities, Solid Waste Management Facilities, and/or Recycling/Recovery Facilities to be used for off-site waste disposal for those wastes described in Section 02110 Waste Removal, Handling, and Storage and Section 02120 Off-Site Transportation and Disposal.
 - 8. Construction Water Management Plan describing the means and methods of construction water handling, storage, treatment, and/or disposal.
 - 9. Spill and Discharge Control Plan and specifically how it pertains to drum removal, handling, and storage.
- D. Contractor shall submit a Health and Safety Plan (HASP) for review and acceptance by the Engineer in accordance with Section X of the Contract Documents, Standard

Specification 00003 - Minimum Requirements for Health and Safety. HASP shall describe monitoring programs.

- E. The following summarizes the general project work required by the Contract Documents.
 - 1. Manage on-site stormwater and construction water to minimize erosion and transport of sediment and contaminants to off-site drainages, water courses, and land.
 - 2. Remove for off-site recycling/disposal the following surficial and uncovered wastes:
 - a. clearing debris as defined in Specification Section 02331 Clearing and Grubbing;
 - b. bulky wastes as defined in Specification Section 02110 Waste Removal and Handling;
 - c. drums, drum nests, drum remnants and/or spilled/leaked former drum contents as defined in Specification Section 02140 Drums and Visually Impacted Soil Removal, Handling, and Storage; and
 - d. excess solid waste beyond the available capacity of the re-graded landfill defined by the new solid waste boundary.
 - 3. Consolidate on-site the following wastes not identified in Item 2 within the new solid waste boundary:
 - a. grubbings as defined per Specification Section 02231 Clearing and Grubbing;
 - b. excess soil generated from on-site excavation outside the existing solid waste boundary; and
 - c. solid waste.
 - 4. Install a soil cover system over regraded wastes within the new solid waste boundary.
 - 5. Install landfill and perimeter stormwater controls to manage post-closure stormwater runoff to minimize erosion and protect the integrity of the cover system.
 - 6. Stabilize the landfill and all disturbed areas of the Site.

1.04 WORK AND WORK SEQUENCE

The following generally summarizes the primary work components and anticipated construction sequence:

- A. Prepare, submit to Engineer prior to commencement of construction for review and approval, and implement work plans and other submittals required as outlined in Section III of the Contract Documents and in Sub-Part 1.03C for review.
- B. Secure permits outlined in Section 01410 Regulatory Requirements.
- C. Mobilize equipment and personnel to the Site.

- D. Install and implement required Site health and safety measures and monitoring as required by the Contractor's Health and Safety Plan (HASP).
- E. Install stabilized construction entrance and other temporary facilities and controls.
- F. Install perimeter erosion and sedimentation controls.
- G. Remove, load, and transport off-site for disposal/recycling stockpiled bulky wastes.
- H. Clear trees and brush above the ground surface and dispose of the clearing debris off-site.
- I. Grub areas within the limit of grading and dispose of grubbings on-site as allowed within the designated area.
- J. Excavate on-site waste outside the new solid waste boundary and consolidated within the new solid waste boundary.
- K. Abandon existing groundwater monitoring wells.
- L. Install additional erosion and sedimentation controls and measures including the sedimentation basin in preparation for landfill grading and cover system installation.
- M. Grade landfill within the new solid waste boundary to the required subgrade. Cut and fill waste, relocated consolidated waste, existing cover soils, excess waste soil, and grubbings as required to achieve subgrade and/or the minimum grading performance criteria.
- N. Excavate as required for installation of landfill stormwater controls (slope benches and downdrains) within the new solid waste boundary.
- O. Remove bulky waste items uncovered during the course of waste consolidation and landfill grading. Properly dispose off-site all removed bulky wastes.
- P. Handle, characterize, and properly dispose of any uncovered buried drums, drum nests, drum remnants, and adjacent spilled/leaked contents or visually impacted soils.
- Q. Place re-used on-site select borrow and/or imported select borrow to augment existing on site material, as required, to achieve minimum grading performance criteria.
- R. Install landfill cover system including associated landfill stormwater controls
- S. Install landfill gas vents.
- T. Install perimeter access road with waterbars.
- U. Stabilize landfill with seed and erosion control matting, or riprap, as required.
- V. Install perimeter stormwater controls including riprap drainage channel, east drainage swale, and culverts.
- W. Install final grade of access road.
- X. Clean sediment basin and outlet structure of accumulated sediment, repair, as required, and convert to a stormwater detention basin.
- Y. Install new monitoring wells.
- Z. Install topsoil, seed, and mulch/erosion control matting in all areas within the limit of grading.
- AA. Seed and mulch all vegetated areas within the limit of work.
- BB. Remove temporary erosion and sedimentation controls downgradient of stabilized areas.
- CC. Install perimeter site controls including chain link fence and gate, and perimeter signage.
- DD. Demobilize equipment and personnel from the Site.
- EE. Complete all remaining work noted in the punch list.
- FF. Prepare and submit final project closeout documentation to the Engineer.
- GG. Maintain vegetated areas for a warranty period of one year from the date of Substantial Completion per Contract Documents Section VIII, Article 12.1.

1.05 CONSTRUCTION ADMINISTRATION

The work shall be planned, scheduled, and performed in stages in order to complete the work within the requirements of the Contract Documents and the appropriate regulatory agencies and permits.

A. Project Startup:

- 1. Project startup shall include the following activities, which are not necessarily in order:
 - a. Attend a Pre-Construction Meeting
 - b. Develop and submit all required pre-construction submittals for acceptance;
 - c. Complete assessments and plans as outlined in Sub-Part 1.03C and submit to Engineer for review;
 - d. Provide required entrance medical examinations for employees designated to work on the project in accordance to the HASP;
 - e. Conduct site-specific safety training in accordance with the HASP; and
 - f. Secure permits outlined in Section 01410 Regulatory Requirements.
- 2. Begin construction after receipt of and meeting the conditions noted in the Notice to Proceed.

B. Remedial Action:

- 1. Complete the remedial action work specified within the Contract Documents.
- 2. Attend regular project meetings to be held at least every two (2) weeks.
- 3. Prepare and submit monthly pay requisitions as work progresses.

C. Project Closeout:

- 1. Request Substantial Completion Inspection;
- 2. Request a Certificate of Substantial Completion;
- 2. Perform a Site inspection with the Department and Engineer to accept work and identify remaining work to be completed (punch list);
- 3. Complete all remaining work noted in the punch list;
- 4. Perform a final Site inspection with the Department and Engineer to verify all work is complete;
- 5. Prepare and submit final project closeout documentation as described in Section 01770 Project Closeout Procedures to the Engineer.
- 6. Complete final pay requisition with accompanying balancing change order as required; and
- 7. Achieve Certificate of Final Completion.

1.06 SCHEDULE

- A. Construction shall start no earlier than the Notice to Proceed (NTP) date with a contract time not to exceed 180 calendar days from the NTP date to Substantial Completion and 210 calendar days from NTP to Final Completion.
- B. Contractor is allowed to work on the site up to seven days per week, but shall restrict work to the hours of 6:00 am to 6:00 pm, Monday through Friday. However, if dispensation can be obtained from the New York State Department of Labor and approval obtained from the Engineer, additional hours/days of work may be allowed.

1.07 OTHER GENERAL REQUIREMENTS

- A. Comply with all project-related permits and apply/obtain all Contractor responsible permits prior to the commencement of work. Refer to Section 01410 Regulatory Requirements for a list of applicable permits.
- B. Mobilization to the Site shall not occur before the Department issues a Notice to Proceed.
- C. Make arrangements for temporary storage of materials and supplies and for timely delivery to the job site.
- D. Assist the Engineer and Town/County/State inspectors as required in the review of construction.
- E. Maintain up-to-date records on site.
- F. Maintain the project Site in a neat condition.
- G. All heavy duty vehicles operated by the Contractor shall comply with the New York State Diesel Emissions Reduction Act (DERA), Environmental Conservation Law 19-0323, and 6 NYCRR Part 248 when using heavy duty vehicles, as described in Section 01352 Environmental Protection Procedures.

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

3.01 HEALTH AND SAFETY

A. The Contractor is advised that the Work will be performed on a Site that may contain hazardous waste. The Contractor is responsible for developing a Site Specific Health and Safety Plan (HASP) in accordance with Contract Documents Section X, Standard Specification 00003 for its operations. The Contractor shall implement this plan taking precautions as necessary to protect the public and work force personnel from potential hazards. The Contractor shall utilize personnel with approved hazardous waste training as required.

B. Refer to Section X, Standard Specification 00003 – Minimum Requirements for Health and Safety.

3.02 PROTECTION OF PROPERTY AND OPERATIONS

- A. The Contractor is advised that work is required within the Town of Cortlandville South Hill Road right-of way. The property where the remedial action will be implemented is now or formerly owned by the Town of Cortlandville, New York.
- B. The Contractor shall utilize every precaution to protect the property and adjacent properties from damage during execution of the work. Any damage that the Contractor may inflict shall be repaired or replaced in a prompt manner as directed by the Engineer at no additional cost to the Department.
- C. The Contractor shall take all measures required to minimize adverse impacts from execution of the work on the property owner or abutters and shall not interfere with their operations.
- D. The Contractor shall coordinate site restrictions and required vehicular traffic control plans with the Town of Cortandville as appropriate.

3.03 CONTRACTOR'S USE OF PREMISES

- A. The Contractor shall establish staging and storage areas within the delineated limit of work boundary on the Construction Contract Drawings. Staging and storage areas are to be agreed upon and accepted by Engineer.
- B. **NO SMOKING** will be allowed within the Site work area.
- C. The Contractor shall assume full responsibility for the protection and safe keeping of products and equipment under this Contract that are stored on-site during the project construction.

3.04 OTHER REQUIREMENTS

- A. It is the responsibility of the Contractor to notify the Department/Engineer and operators of underground utilities when construction, excavation, or other work may affect such utilities.
- B. It is the responsibility of the Contractor to notify the appropriate local authority in the Town and/or County when construction or associated impacts will occur within the road right-of-way and/or may affect roadways.
- C. The Contractor is responsible for using special care and or special considerations which may be necessary for proper execution of the Work, but which may not be specifically identified in this section. The Contractor shall comply with the entire requirements of the Contract Documents and shall exercise special care wherever required for proper execution of the intended work of this contract.
- D. Work of others at the Site is not to interfere with the Contractor's schedule.

3.05 COMPENSATION

Compensation for execution of the intended work as defined by the Contract Documents is specified in Contract Documents Section XII– Measurement for Payment.

END OF SECTION

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Required Submittals are identified in each technical specification section of the Contract Documents. A summary of Submittals is provided at the end of this section. Submittals shall be provided to the Engineer, as required, unless otherwise specified. Submittals include, but are not limited to the following:
 - 1. Data;
 - 2. Construction Contract Drawings;
 - 3. Instructions;
 - 4. Schedules;
 - 5. Statements;
 - 6. Reports;
 - 7. Plans;
 - 8. Certificates:
 - 9. Samples;
 - 10. Records:
 - 11. Operation and Maintenance Manuals;
 - 12. Certified payrolls.
- B. The Contractor shall complete all submittals required by the Contract as indicated in the individual specification sections including but not limited to the submittals summarized in Table 01330-1: Submittal Summary provided at the end of this section.

PART 2 - PRODUCTS

Not Applicable.

PART 3 - EXECUTION

3.01 GENERAL

- A. Submittals shall include items such as:
 - 1. Manufacturer's or fabricator's drawings;
 - 2. Descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves;
 - 3. Test reports;
 - 4. Samples;
 - 5. Operation and Maintenance Manuals (including parts list);
 - 6. Certifications:
 - 7. Warranties: and
 - 8. Other pertinent data.

3.02 SUBMITTAL REQUIREMENTS

A. Transmittal Form:

- 1. A Transmittal form shall accompany all Submittals.
- 2. The Transmittal form shall be developed and furnished by the Engineer.
- 3. Transmittals shall include the following information, at a minimum:
 - a. Submittal number in sequence, beginning with 1 (subsequent <u>revised</u> Submittals shall be identified with a number and letter);
 - b. Date;
 - c. Project title and project number;
 - d. Contractor's name and address:
 - e. Identification of each item submitted under the single Transmittal with a separate sequential number (e.g. 1.1, 1.2, etc.). Group only like items in a single Submittal;
 - f. Reference to the Specification Section and Sub-Part number and/or Construction Contract Drawing sheet and detail number (if applicable) pertinent to the data submitted;
 - g. Notification of any deviations from Contract Documents;
 - h. Return date required by Contractor; and
 - i. Other pertinent data.
- B. Contractor Certification: The Contractor's Certification that the Submittal meets contract requirements. The certification may be provided as part of the Transmittal, on a separate sheet attached to the Transmittal, or as a stamp on the Submittal itself and shall contain the following:

- 1. Contractor firm name:
- 2. Point of contact name, signature, and title;
- 3. Date; and
- 4. Contractor's corrections as noted on Submittal data and/or attached sheet(s).

C. Procedures:

- 1. The Contractor shall schedule submissions at least 14 calendar days before Submittal approvals will be needed, except where different lead time is specified.
- 2. The Contractor shall deliver Submittals to the Engineer in electronic form by email.
- 3. The Contractor-signed Transmittal shall be scanned and attached to the other electronic Submittal documents. Alternately, a digital signature may be supplied by the Contractor. The subject line of the email shall clearly note the project name and Submittal number.
- 4. The Contractor shall maintain a copy (electronic or paper) of the Submittal and Transmittal on site.
- 5. At the time of each submission, the Contractor shall call to the Engineer's attention, in writing, any deviations in the Submittal from the requirements of the Contract Documents. Proposed "Substitutions" or "or-equal" submittals shall be prepared and submitted in accordance with Section VIII, Article 5.7.1

D. Submittals shall include:

- 1. Date and revision dates:
- 2. Project title and number;
- 3. The names of:
 - a. Engineer;
 - b. Contractor;
 - c. Subcontractor;
 - d. Supplier;
 - e. Manufacturer; and
 - f. Separate detailer when pertinent.
- 4. Identification of product or material;
- 5. Field dimensions, clearly identified as such;
- 6. Specification Section and Sub-Part number and/or Construction Contract Drawing sheet and detail number;
- 7. Applicable standards, such as ASTM or Federal Specification number;
- 8. Submittals that include "substitutions" for requirements in the Contract Documents or "or equal" assertions by the Contractor, shall be prepared and submitted in accordance with Section VIII, Article 5.7.1.

- E. Submittals shall be submitted electronically to the extent practical.
 - 1. Documents included in the submittal should be converted to portable document format (pdf) or scanned to pdf. The name of the file shall include the submittal number. The subject line of the email shall include the submittal number and title.
 - 2. The size of electronic files transferred by email shall conform to the typical two (2) Megabyte limits common for many email systems. For larger transmissions that cannot be broken into smaller parts, alternate electronic transfer options should be coordinated including posting to approved ftp sites.
 - 3. For fabrication or detail drawings in paper form, provide approved standard sizes such as:
 - a. 22 inches by 34 inches;
 - b. 11 inches by 17 inches; or
 - c. 11 inches by 8 1/2 inches.

Table 01330-1: Submittal Summary

No.	Specification	Specification	Submittal Item	Schedule
	Section	Part		
1	00001	5b	Preliminary Critical Path Method (CPM) Diagram, Schedule of Values, and supporting narrative	Within 5 days of Apparent Low Bidder notification
2	00001	5c	Interim CPM Diagram, Schedule of Values, Schedule of Shop Drawing Submissions, and supporting narrative	Prior to commencing construction
3	00001	5d	Detailed CPM Diagram, Schedule of Values, Schedule of Shop Drawing Submissions, and supporting narrative	To accompany each request for progress payment
4	00001	5h	As-Built CPM Diagram and Schedule Reconciliation Report	To accompany request for final payment
5	00003 and Section III	1.01B	Health and Safety Plan (HASP)	Within 5 days of Apparent Low Bidder notification
6	01110 and Section III	1.03C	Construction Work Plan (Plan of Operations), Sampling Plan, Preliminary Progress Schedule	Within 5 days of Apparent Low Bidder notification
7	01410	1.04	Copies of approved permits	Prior to commencing construction associated with the permit
8	01450	1.04A	Pre-Construction Submittals	In accordance with Section III of contract (either within 5 days of Apparent Low Bidder notification or within 14 days from the date of the Notice of Intent to Award letter as specified within Section III)
9	01450 and Section III	1.04B	Construction Quality Control Plan (CQCP)	Within 5 days of Apparent Low Bidder notification
10	01450	1.04C	Weekly CQC Reports, Test Reports, Deficiency Reports, and/or Project Summaries	As soon as the report is available
11	01720	1.03A	Qualifications of persons providing field engineering and surveying services	At the request of the Engineer
12	01720	1.03B	Documentation verifying accuracy of survey work or instrumentation	At the request of the Engineer
13	01720	1.03C	Results of the field verification survey and results of the comparison with the Construction Contract Drawings	Prior to commencing excavation
14	01720	1.03D	Survey data in support of quantity measurements	Prior to or along with payment

Table 01330-1: Submittal Summary

No.	Specification Section	Specification Part	Submittal Item	Schedule
				requisitions
15	01720	1.03E	Survey data and measurements as the Work progresses in support of establishing Record Documents	At the request of the Engineer
16	01770	1.07A	Project Record Documents including as-built survey data (one (1) electronic and one (1) paper set)	At project completion along with request for final payment
17	01770	1.07B	 Transmittal letter containing the following: Date Project title and number; Contractor's name and address; Title and number of each record; Certification that each document as submitted is complete and accurate; and Signature of the Contractor or his authorized representative. 	At project completion along with project record documents
18	01770	1.07C	A directory listing the names, addresses, and telephone numbers of the Contractor, subcontractors, and major equipment suppliers.	At project completion along with request for final payment
19	01770	1.07D	Operation and maintenance instructions for installed materials and equipment.	At project completion along with request for final payment
20	01770	1.07E	All outstanding submittals (documentation and test data)	At project completion along with request for final payment
21				
22	02073	1.04A	Geotextile Manufacturer's Product Data	14 days prior to day approval is required
23	02073	1.04B	Manufacturer's Quality Control Certifications	14 days prior to day approval is required
24	02105	1.03A	Quality Assurance Project Plan	Within 5 days of Apparent Low Bidder notification
25	02105	1.03B	Preliminary (verbal) laboratory analysis results for confirmatory sample testing results	As soon as laboratory analytical results are available.

Table 01330-1: Submittal Summary

No.	Specification Section	Specification Part	Submittal Item	Schedule
26	02105	1.03C	 Sampling and Analysis Reports, including: Field sampling data records including copies of completed field sheets, chain-of-custodies, and field log book entries; Laboratory Data Deliverable; Data Usability Summary Report. 	As soon as the reports are available
27	02110	1.02A	Description of planned means and methods for management of all waste materials removed or generated as a component of the Work (submitted in the Construction Work Plan)	Within 5 days of Apparent Low Bidder notification
28	02110	1.02B	Waste characterization laboratory reports	14 days prior to day approval is required.
29	02120	1.03A	Description of planned means and methods for transporting and disposing of all waste materials removed from the Site or generated as a component of the Work (submitted in the Construction Work Plan), including: • Locations of all identified TSDFs, SWMFs, and/or reclamation/recycling/salvage facilities; • The proposed haul route over local roads to each of the identified facilities.	Within 5 days of Apparent Low Bidder notification
30	02120	1.03B	Contractor video records of the existing condition of all local roads proposed for haul routes.	Prior to commencing hauling activities at the site.
31	02120	1.03C	Permit profile of the Treatment Storage and/or Disposal Facility	Within 5 days of Apparent Low Bidder notification
32	02120	1.03D	Bill of Lading and Manifests for all transported waste loads	As work progresses and as an attachment in support of payment requisitions
33	02120	1.03E	Certified weight slips for each load transported to the disposal facility	As work progresses and as an attachment in support of payment requisitions
34	02140	1.04A	Drum/Container Removal Plan, including:Description of work teams and the function of members	Prior to mobilization to the project site

Table 01330-1: Submittal Summary

No.	Specification Section	Specification Part	Submittal Item	Schedule
			 of work teams involved in drum/container excavation and removal; Air monitoring during drum/container removal; Equipment used during drum/container excavation and removal, with particular reference to how the equipment will limit damage to drums/containers and limit sparking; Spill and Discharge Control Plan to describe procedures to control and contain spilled liquids if a leaking drum is encountered; Procedures if an unusual or bulging drum/container is encountered; Procedures to remove drums/containers from excavations and place, if necessary, in overpack drums or transfer drums; Equipment to transport drums/containers to the staging area; and Consolidating drums and visibly impacted soils of similar waste material and placing in haulage units for transport to a permitted facility for disposal. 	
35	02140	1.04B	 Manufacturers' Product Data for drum and container work, including: Repack drums (liquids): 30 gallon and 55 gallon DOT – approved Closed Head Drums; Repack drums (solids): 55 gallon DOT-Approved Open Head Drums; Overpack Drums/Containers: 85 gallon DOT-approved drums; Bulk Containers: 15 cubic yards DOT approved liquid tight roll-off container; 	14 days prior to day approval is required

Table 01330-1: Submittal Summary

No.	Specification Section	Specification Part	Submittal Item	Schedule
			 List of proposed drum handling equipment; Other materials selected by Contractor for the purpose intended and subject to Engineer's approval prior to use; and Record Drawing depicting the location of each surficial or buried intact drum encountered. 	
36	02245	1.03A	Construction Water Management Plan	Prior to commencing work at the site
37	02300	1.04A	Borrow source information: Name; Location; and Available/previous laboratory testing data.	14 days prior to day approval is required
38	02300	1.04B	Subcontractor's Quality Control Testing Laboratory(ies) information: Name; and Qualifications	7 days following Notice to Proceed
39	02300	1.04C	Select Borrow Source Test Reports - Geotechnical	14 days prior to day approval is required
40	02300	1.04C	Crushed Stone Source Test Reports - Geotechnical	14 days prior to day approval is required
41	02300	1.04C	Subbase Course Source Test Reports - Geotechnical	14 days prior to day approval is required
42	02300	1.04C	Select Borrow Source Test Reports - Analytical	14 days prior to day approval is required
43	02300	1.04C	Subgrade Fill Field Moisture/Density (Compaction) Test Reports	As soon as the report is available
44	02300	1.04C	Subbase Course Field Moisture/Density (Compaction) Test Reports	As soon as the report is available
45	02370	1.05A	Stormwater Pollution Prevention Plan	Within 5 days of Apparent Low Bidder notification
46	02370	1.05B	Description of proposed means and methods to control erosion and sedimentation (submitted in the Construction Work Plan)	Within 5 days of Apparent Low Bidder notification

Table 01330-1: Submittal Summary

No.	Specification Section	Specification Part	Submittal Item	Schedule
47	02370	1.05C	Manufacturer's Product Data for filter berm material (if utilized)	14 days prior to day approval is required
48	02370	1.05C	Manufacturer's Product Data for silt fence (if utilized)	14 days prior to day approval is required
49	02522	1.04A	 Information, including the following: Drilling and well installation methodology; Well development approach; Water treatment plan and justification; Recommended material for well housing and justification; Number of personnel to be deployed during the field program; and Proposed schedule/logistics for completing the Work. 	14 days prior to day approval is required
50	02522	1.04B	Field Test Reports including: Written assurance each well meets the requirements specified in the Contract Documents for materials, depths, plumbness, and alignment; Well development records; and Drilling records including casings, cement grout, well screens, penetration, and filter sand.	As soon as possible after installation work is complete
51	02526	1.04A	Well Abandonment Completion Form	Upon completion of abandonment of each well
52	02634	1.04A	Manufacturer's Product Data for site piping	14 days prior to day approval is required
53	02921	1.04A	Grass Seed Vendor's Certificate	14 days prior to day approval is required

Table 01330-1: Submittal Summary

No.	Specification Section	Specification Part	Submittal Item	Schedule
54	02921	1.04B	Fertilizer Manufacturer's Product data showing chemical analysis and percent composition	14 days prior to day approval is required
55	02921	1.04C	Hydraulic Seeding Method	14 days prior to day approval is required

Note:

1. This list is not meant to be an all encompassing list of submittals required by the Contractor. The Contractor is not exempt from submitting any technical or nontechnical submittal required by the Contract Documents that is not included in Table 01330-1.

ENVIRONMENTAL PROTECTION PROCEDURES

PART 1 – GENERAL

1.01 DESCRIPTION

Contractor shall perform the Work minimizing environmental pollution or damage as the result of construction operations. Environmental pollution or damage results from the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; the unfavorable altering of ecological balances of importance to human life; affecting other species of importance to humankind; or degrading the utility of the environment for aesthetic, cultural and/or historical purposes. The control of environmental pollution or damage requires consideration of land, water, and air, and includes management of visual aesthetics, noise, solid waste, and dust, as well as other pollutants. The environmental resources within the project limit of work and those affected beyond shall be protected during the entire duration of this Contract.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Standard Specification Section 00003 Minimum Requirements for Health and Safety
- B. Section 01500 Temporary Facilities and Controls
- C. Section 01560 Dust and Odor Control
- D. Section 02110 Waste Removal, Handling, and Storage
- E. Section 02120 Off-Site Transportation and Disposal
- F. Section 02370 Erosion and Sedimentation Control

1.03 DEFINITIONS

- A. Sediment soil and other debris that has eroded and has been transported by runoff water or wind.
- B. Solid Waste: typical municipal household and/or commercial/ industrial waste in solid form and not classified as bulky waste or hazardous waste, including rubbish/trash, garbage, other miscellaneous discarded material/debris, soil, sediment, sludge, and/or ash.
- C. Construction Water: Wastes in liquid form collected during construction that may include construction water from dewatering activities, groundwater monitoring well development water, leachate, sediment laden stormwater runoff, and/or decontamination fluids.

- D. Leachate Waste generated from the percolation of liquids (usually stormwater) through or contact of liquids with solid waste or contaminated soils, sediment, or sludge.
- E. Sanitary Wastes: wastes characterized as sanitary sewage. Refer to Section 01500 Temporary Facilities and Controls.
- F. Oily Waste Wastes generated from petroleum products and bituminous materials.
- G. Heavy Duty Vehicle on road and off road vehicles powered by a diesel engine with a gross vehicle weight greater than 8,500 pounds.
- H. On Road Vehicle a motor vehicle powered by a diesel engine that has a gross vehicle weight rating greater than 8,500 pounds and is designed primarily for transporting persons or properties on a street or a highway.
- I. Off Road Vehicle a motor vehicle, other than an on road vehicle, powered by a diesel engine with a gross vehicle weight greater than 8,500 pounds or having an engine of 50 horsepower or greater.
- J. Gross Vehicle Weight Rating the value specified by the vehicle manufacturer as the maximum loaded weight of a single or combination vehicle.
- K. Ultra Low Sulfur Diesel diesel fuel having sulfur content of 0.0015 percent (15 ppm) of sulfur or less.
- L. Best Available Retrofit Technology (BART) technology verified by the Environmental Protection Agency or California Air Resources Board for reducing the emissions of pollutants that achieves reductions in particulate matter emissions at the highest classification level for diesel emission control strategies that is applicable to the particular engine and application. Such technology shall also, at a reasonable cost, achieve the greatest reduction in emissions of nitrogen oxides at such particulate matter reduction level and shall in no event result in a net increase in the emissions of either particulate matter or nitrogen oxides.
- M. Classification level for diesel emission control strategies particulate matter reduction classification levels and corresponding particulate matter percent reductions as follows:
 - 1. Particulate matter reduction less than 25%: not verified.
 - 2. Particulate matter reduction greater than or equal 25%: Classification Level 1.
 - 3. Particulate matter reduction greater than or equal 50%: Classification Level 2.
 - 4. Particulate matter reduction greater than or equal 85%: Classification Level 3.

PART 2 - PRODUCTS

Not Applicable

3.01 PROTECTION OF NATURAL RESOURCES

- A. Preserve the natural resources within the limit of work and outside the project limit of work. Restore to an equivalent or improved condition upon completion of Work. Confine construction activities to within the limit of work indicated on the Construction Contract Drawings.
- B. The Contractor shall provide means, methods, and facilities to prevent contamination of soil, water, and atmosphere from waste discharges due to spills and releases as a result of the Contractor's operation.
- C. Land Resources:
 - 1. Except in areas to be cleared, do not remove, cut, deface, injure, or destroy trees or shrubs without the Engineer's permission. Do not fasten or attach ropes, cables, or guys to existing trees for anchorages unless authorized by the Engineer. Where such use of attached ropes, cables, or guys is authorized, the Contractor shall be responsible for any resultant damage.
 - Protect existing trees and shrubs which are to remain and which may be injured, bruised, defaced, or otherwise damaged by construction operations. Cut off vegetation to be cleared flush with or as close as practical to the original ground surface in areas to be cleared, except for trees and vegetation indicated or directed to be left standing.
 - 3. Remove traces of temporary construction facilities such as haul roads, work areas, stockpiles of excess or waste materials, and other signs of construction. Grade temporary roads and similar temporary areas to blend with surrounding conditions.

D. Water Resources:

- 1. Oily Wastes Prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water.
- 2. Sediments Prevent sediment migration outside the limit of work
- 3. Leachate minimize the generation of leachate and prevent migration of leachate to surface drainages beyond the limit of work.
- E. Fish and Wildlife Resources Do not disturb fish and wildlife. Do not alter water flows or otherwise significantly disturb the native habitat adjacent to the project and critical to the survival of fish and wildlife, except as indicated or specified as part of the work

3.02 HISTORICAL AND ARCHAEOLOGICAL RESOURCES

- A. Carefully protect in-place any historical and archaeological items or human skeletal remains discovered in the course of work and report immediately to the Engineer.
- B. Stop work in the immediate area of the discovery until directed by the Engineer to resume work.

3.03 EROSION AND SEDIMENT CONTROL MEASURES

- A. Refer to the Construction Contract Drawings and Section 02370 Erosion and Sedimentation Control for additional requirements.
- B. Burnoff of the ground cover is not permitted.
- C. Protection of Erodible Soils
 Immediately finish the earthwork brought to a final grade, as indicated or specified.
 Immediately protect the side slopes and back slopes upon completion of rough grading.
 Plan and conduct earthwork to minimize the duration of exposure of unprotected soils.
- D. Temporary Protection of Erodible Soils
 Use the methods prescribed in Section 02370 Erosion and Sedimentation Control to prevent erosion and control sedimentation.

3.04 CONTROL AND DISPOSAL OF WASTES

- A. Existing solid waste to be consolidated and landfilled on-site shall be managed in accordance with the requirements of Section 02110 Waste Removal, Handling, and Storage.
- B. Liquid waste generated and captured during the course of the project shall be managed in accordance with the requirements of Section 02110 Waste Removal, Handling, and Storage and Section 02120 Off-Site Transportation and Disposal.
- C. Pick up site trash, and place in containers which are regularly emptied. Do not prepare, cook, or dispose of food on the project Site. Prevent contamination of the Site or other areas when handling and disposing of wastes. Upon project completion, leave the Site clean. Control and properly handle and dispose of waste in accordance with Section 02110 Waste Removal, Handling, and Storage and Section 02120 Off-Site Transportation and Disposal.
- D. Temporary sanitary facilities shall be managed in accordance with Section 1500 Temporary Facilities and Controls. Include provisions for pest control and elimination of odors. Upon completion of the work, the facilities shall be removed by the Contractor from the premises, leaving the premises clean and free from nuisance.

3.05 DUST CONTROL

- A. Provisions shall be taken during all construction activities to keep airborne dust levels low, including during non-working periods. Dust control measures shall be implemented when visible air-borne dust becomes noticeable and is carried out of immediate work/disturbed areas.
- B Contractor shall treat the soil stockpiles, haul roads, and other areas disturbed areas as directed in Section 01560 Dust and Odor Control.
- C. Contractor shall adhere to the requirements of Section X, Standard Specification Section 00003 Minimum Requirements for Health and Safety.

3.06 NOISE

A. Make the maximum use of low-noise emission equipment according to USEPA regulations.

3.07 DIESEL EMISSIONS REDUCTION

- A. The Contractor shall comply with the New York State Diesel Emissions Reduction Act (DERA), Environmental Conservation Law 19-0323, and 6 NYCRR Part 248 when using heavy duty vehicles, including the following components:
 - 1. All heavy duty vehicles shall be powered by ultra low sulfur diesel fuel.
 - 2. All heavy duty vehicle diesel engines shall be retrofitted with the best available retrofit technology (BART) applicable to the particular engine model and vehicle application.
 - 3. All heavy duty vehicles that meet the applicability requirements of 6 NYCRR Part 248 shall have Low NOx rebuild kits installed on the vehicles' engine prior to the installation of any classification level 1, 2 or 3 BART device.
 - 4. 6 NYCRR 248-1.1(b)(14) specifies vehicle exceptions to these requirements; exceptions include most off road construction vehicles, earth movers, farm vehicles, authorized emergency vehicles, self propelled caterpillar or crawler type equipment operated on a contract site.
 - 5. 6 NYCRR 248 provides waiver provisions for its regulations in the event that either ultra low sulfur diesel is not readily available or particulate matter reduction classification level technologies are not applicable or available for a specific covered vehicle or both, pending approval of the proper applications to the Department as described in 6 NYCRR 248-4. The Department will also waive the provisions of Environmental Conservation Law 19-0323 for any diesel powered vehicle if that vehicle will cease to be used in New York State on or before December 31, 2013; the Heavy Duty Vehicle/Engine Useful Life Waiver Form is attached to the end of this specification.

New York State Department of Environmental Conservation

Division of Air Resources

Bureau of Mobile Sources and Technology Development, 2nd Floor

625 Broadway, Albany, New York 12233-3255 **Phone:** (518) 402-8292 • **FAX:** (518) 402-9035

Website: www.dec.ny.gov



Heavy Duty Vehicle/Engine Useful Life Waiver Form

Request for Waiver from the provisions of ECL section 19-0323(3) requiring the use of Best Available Retrofit Technology (BART) based on the useful life of the vehicle.

Pursuant to Environmental Conservation Law (ECL) section 19-0323(5), the Department shall issue a waiver of the requirements of ECL 19-0323(3) to a state agency, state or regional public authority, or a person operating a diesel vehicle on behalf of a state agency or state or regional public authority upon receipt of a request from such entity, provided that such vehicle will cease to be used in New York State on or before December 31, 2013.

Complete this form and submit by mail, fax or e-mail (if fax or e-mail, applicant must retain the original) to:

Director
Bureau of Mobile Sources & Technology Development
New York State Department of Environmental Conservation
Division of Air Resources
625 Broadway
Albany, NY 12233-3255

Fax: 518-402-9035

E-mail: 248waiver@gw.dec.state.ny.us

Name of Agency, Public Authority or Contractor:

If deemed complete, the Division of Air Resources will return an approved form to you. If you have any questions, please contact the Bureau of Mobile Sources & Technology Development at (518) 402-8292.

Address:	
Authorized Representative contact name & Title:	
Authorized Representative telephone no. :	
Date:	

Vehicle Identification:	
License Plate #:	
VIN # :	
Vehicle Manufacturer:	
Vehicle Model Year:	
Engine Identification:	
Engine Manufacturer:	
Engine Model Year:	
State Agency/Public Authority/Contractor State commissioner or other responsible party of the	
I hereby affirm that I am the that I am authorized to complete and submit this founder my supervision and direction; and that the incomplete to the best of my knowledge and belief.	orm; that this form was completed by me or
I further certify that the subject vehicle/engine iden service in New York State on or before December	
Print Name:	
Signature:	
Date:	
For NYSDEC use only:	
APPROVED BY:	
David J. Shaw Director, Division of Air Resources	Date

REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 DESCRIPTION

Comply with local, state, and federal regulations appropriate or applicable to the proposed work.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01352: Environmental Protection Procedures
- B. Section 02105: Chemical Sampling and Analysis
- C. Section 02120: Off-Site Transportation and Disposal
- D. Section 02245: Construction Water Management
- E. Section 02370: Erosion and Sedimentation Control

1.03 GENERAL REQUIREMENTS

Regulations applicable to remediation activities will include but not necessarily be limited to those promulgated by the following regulating authorities:

- A. Environmental Protection Agency (USEPA)
 - 1. Clean Air Act (CAA);
 - 2. Clean Water Act (CWA); and
- B. United States Department of Labor
 - 1. Occupational Safety and Health Act (OSHA).
- C. New York State Department of Environmental Conservation (the Department)
 - 1. Inactive Hazardous Waste Disposal Site Program (State Superfund Program);
 - 2. New York Codes, Rules, and Regulations (NYCRR), 6 NYCRR Part 375;
 - 3. New York State Department of Environmental Conservation, Department of Environmental Remediation, *Technical Guidance for Site Investigation and Remediation* (DER-10); and
 - 4. State Pollution Discharge Elimination System (SPDES).

1.04 PERMIT APPLICATION BY CONTRACTOR

Permits that must be applied for by Contractor and approved by regulating authority prior to

commencing associated work.

A. Town of Cortlandville – Highway Permit for work in the Town right-of-way.

B. New York State Department of Environmental Conservation - Approval for discharge of

construction waters to surface or groundwater resources.

C. New York State Department of Environmental Conservation, State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from

Construction Activity – In accordance with 6 NYCRR 375, a SPDES permit does not have to be obtained, but the requirements of the permit need to be followed by the

Contractor.

D. General - Other permits as necessary to perform the work as described in the Contract

Documents.

1.05 ACCESS PERMISSIONS

A. The Department will secure an access agreement with the east property abutter to allow limited

temporary access by the Contractor, Engineer, and Department during construction.

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

Not Applicable

END OF SECTION

01410-2

CONTRACTOR QUALITY CONTROL

PART 1 - GENERAL

1.01 DESCRIPTION

This section covers quality control procedures and testing to be completed by the Contractor during the Work. Prior to commencement of the Work, the Contractor shall prepare a Contractor Quality Control (CQC) Plan detailing the procedures to be followed and testing to be completed. Quality control testing shall be executed as required in the Contract Documents.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01330 Submittal Procedures
- B. Section 01770 Project Closeout Procedures
- C. Section 02105 Chemical Sampling and Analysis
- D. Section 02300 Earthwork

1.03 REFERENCES AND STANDARDS

A. Conform to referenced standards with date of issue current with the date of the bid, except where stated otherwise or referenced differently by code.

1.04 SUBMITTALS

- A. Pre-Construction Submittals (in accordance with Section III of the Contract).
- B. Contractor Quality Control (CQC) Plan shall identify personnel, procedures, instructions, records, and forms to be used in carrying out the requirements of the Work. The CQC Plan shall describe the Contractor's means and methods to provide and maintain effective Quality Control for construction, sampling, and testing activities. No work on site shall be permitted until the COC Plan is approved by the Engineer.
- C. Weekly CQC Reports, Test Reports, Deficiency Reports, and Project Summaries

1.05 DEFINITIONS

A. Quality Control: Activities including observing, measuring, sampling, and testing undertaken by the Contractor to determine that work performed and/or products/materials provided and installed meet the requirements of the Contract Documents and the quality

specified therein.

1.06 QUALITY CONTROL SAMPLING AND TESTING

- A. The Contractor shall notify the Engineer a minimum of 72 hours prior to any quality control sampling and testing activities. The Engineer and Department reserve the right to collect duplicate samples for quality assurance testing.
- B. All third party quality control test reports shall be reported/sent directly to the Engineer and shall not be routed through the Contractor. The Contractor shall give their subcontracted laboratory permission to send reports directly to the Engineer.

PART 2 - PRODUCTS

Not applicable.

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS

- A. The quality of all Work shall be the responsibility of the Contractor.
- B. Perform sufficient inspections and tests of all items of work, on a continuing basis, including that of subcontractors, to ensure conformance to applicable specifications and Construction Contract Drawings with respect to the quality of materials, workmanship, construction, and functional performance.
- C. Provide qualified personnel, appropriate facilities, instruments, and testing devices necessary for the performance of the quality control function.
- D. Controls shall be adequate to cover all construction operations, shall be keyed to the proposed construction sequence, and shall be coordinated by the Contractor's quality control personnel.

3.02 CONTRACTOR QUALITY CONTROL (CQC) PLAN

- A. Prepare and submit a Contractor Quality Control Plan to the Engineer for approval.
- B. Comments or approval from the Engineer will be submitted to the Contractor within 14 calendar days following receipt of the plan. The Contractor shall adequately respond to comments to the satisfaction of the Engineer within 14 calendar days following receipt of any comments from the Engineer.
- C. No work on site shall be permitted until the comments received are adequately addressed by the Contractor and the CQC Plan is approved by the Engineer.
- D. The CQC Plan, at a minimum, shall include the following:

- 1. A description of the Quality Control Organization, including charts showing lines of internal Contractor authority, and external Contractor, subcontractor, and Engineer relationships/communications. The Quality Control Organization shall include the names, qualifications, duties, and responsibilities of each person assigned to a quality control function. The Quality Control Organization chart shall identify a Contractor's Quality Control Manager whose responsibilities and qualifications are described in Sub-Part 3.04 Contractor Quality Control Organization.
- 2. Method of performing, documenting, and enforcing quality control operations during both Contractor and subcontractor work including inspection and testing.
- 3. Inspections as described in the Sub-Part 3.05 Inspections.
- 4. Provide a list of analytical or testing laboratories to be used by the Contractor for testing required by the Specifications with listed test methods to be performed by each laboratory indicated.
- 5. Protocol describing corrective actions to be taken by the Contractor with specifically defined feedback systems that include the Engineer. Personnel responsible for initiating and carrying out corrective action shall be indicated in the protocol.
- E. Submit Weekly CQC Reports, Test Reports, Corrective Action Reports and Project Summaries as required by the Contract Documents.

3.03 NOTIFICATION OF CHANGE

A. After submittal and approval of the CQC Plan, the Engineer shall be notified in writing of any proposed changes to the CQC Plan.

3.04 CONTRACTOR QUALITY CONTROL ORGANIZATION

A. CQC Manager:

- 1. An individual within the Contractor's organization who is responsible for overall management of the CQC Plan and have the authority to act in all CQC matters for the Contractor.
- 2. The CQC Manager shall ensure that the work during execution and upon completion is in compliance with the Contract Documents.
- 3. The CQC Manager for this Contract shall be a qualified construction manager/engineer or comparable individual with a minimum 2 years of applicable experience as a Project Manager, Project Engineer, Superintendent, or CQC Manager. The CQC Manager shall be independent of the Project Superintendent.
- 4. The CQC Manager shall be on-site whenever work is in progress to manage the Contractor Quality Control program as described in CQC Pan and the Contract Documents.
- 5. All submittals for approval shall be reviewed and modified or corrected as needed

by the CQC Manager or authorized assigns prior to forwarding to the Engineer.

3.05 INSPECTIONS

- A. The CQC Plan shall include the following inspections and tests:
 - 1. The Contractor shall perform preparatory inspections prior to beginning each feature of work on any on-site construction conducted by the Contractor or a subcontractor. Preparatory inspections for the applicable feature of work shall include:
 - a. review of submittal requirements and all other Contract requirements with the performance of the work;
 - b. check to assure that provisions have been made to provide required field quality control testing;
 - c. examine the work area to ascertain that all preliminary work has been completed;
 - d. verify all field dimensions and advise the Engineer of any discrepancies;
 - e. perform a physical examination of materials and equipment to assure that they conform to approved shop drawings or submittal data and that all required materials and/or equipment are on hand and comply with the Contract requirements.
 - 2. Perform initial inspection as soon as work begins on a representative portion of the particular feature of work, and include examination of the quality of workmanship as well as review of quality control testing for compliance with the Construction Document requirements.
 - 3. Perform follow-up inspections continuously as any particular feature of work progresses to ensure compliance with Contract requirements, including quality control testing, until completion of that feature of work.

3.06 TESTING

- A. The Contractor shall be responsible for all required testing, documentation, and corrective measures. The Contractor shall perform tests specified or required to verify that control measures are adequate to provide a product which conforms to Contract requirements.
- B. Specific quality control testing requirements including types of tests, frequency of tests, and performance outcomes measured by the tests are indicated in each specification section associated with that component of the work.

3.07 NONCONFORMING WORK

A. If inspections or testing by the CQC Manager or other member of the CQC Organization identify Work as not meeting the required quality standard of the Contract Documents, the

- work shall be considered nonconforming.
- B. If quality assurance inspections or testing performed by the Engineer or the Department identify Work as not meeting the required quality standard of the Contract Documents, the work shall be considered nonconforming.
- C. Nonconforming work shall be remedied by the Contractor through corrective action.
- D. Nonconforming work shall be reported in the CQC Weekly Report.

3.08 CORRECTIVE ACTION

- A. Corrective action of nonconforming work shall take place as soon as possible after identification of the nonconformance.
- B. Corrective action plans shall be communicated with the Engineer and shall include rework, as necessary along with all associated CQC Plan requirements including inspection and testing.
- C. At least 72 hours advance notification shall be provided to the Engineer for any additional testing to be performed. The Engineer/Department reserves the right to collect duplicate samples for quality assurance testing.
- D. The corrective action performed to remedy the nonconforming work shall be reported in the CQC Weekly Report. Descriptions of differences in work means, methods, or testing protocols shall be included.

3.09 ACCEPTANCE OF THE WORK

- A. The Engineer/Department will accept the Work completed by the Contractor as meeting the quality requirements for the project as set forth in the Contract Documents.
- B. The basis of acceptance shall be inspections and observations by the Engineer/Department; reported test results submitted to, reviewed by, and accepted by the Engineer; and the reported results of any Engineer/Department performed quality assurance testing.

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work Included:

- 1. Provide such temporary facilities and controls as the Work may warrant. General locations as depicted on the Construction Contract Drawings may be modified as required by the Contractor upon approval of the Engineer and Department.
- 2. Required temporary facilities and controls include:
 - a. Shelter for crews including sanitary facilities conforming to local codes and OSHA requirements.
 - b. Fire protection.
 - c. Contractor utility services including water, electric (generator), and internet access (wireless hub).
 - d. Safety equipment.
 - e. Site security fence and barricades.
 - f. Soil/waste stockpile areas (see Section 02110 Waste Removal and Handling).
 - g. Pumping systems for dewatering and stormwater management (see Section 02245 Construction Water Management).
 - h. Construction water storage tank, as required.
 - i. Erosion and sedimentation controls (see Section 02370 Erosion and Sedimentation Control).
 - j. Engineer's office space (trailer). Include adequate facilities for Engineer (i.e., lighting, desk, file storage cabinets, heating/cooling).
 - k. Sanitary facilities.
 - 1. Temporary portable truck scale.
 - m. Snow removal, as required.
- 3. Other facilities that may be necessary or provided, depending on the Contractor's approach to the work and the preference of the Contractor, include, but are not limited to:
 - a. Contractor's office (trailer) and storage facilities with associated appurtenances.
 - b. Yard lighting (if necessary).

- c. Construction warning, protection, and control devices for maintenance and safety of vehicular traffic (if necessary).
- 4. Completely remove all temporary equipment and materials upon completion of the Work and repair all damage caused by the installation of temporary measures.
- 5. Make all necessary applications and arrangements for electric power, light, water and other utilities. Notify the local electric power company if unusually heavy loads, such as welders, will be connected.

B. Other Requirements:

- 1. Obtain permits as required by local governmental authorities.
- 2. Comply with the latest National Electrical Code.
- 3. Comply with all local, State, and Federal codes, laws, and regulations.
- 4. Allow access to and use of facilities provided by the Contractor to the Engineer and Department.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Contractor's facilities shall be of size and content for adequate administration of the Contract, storage of materials required, and provision for personnel shelter.
- B. Equipment required for personal safety of workmen shall be furnished in full compliance with specific safety requirements of local, state, and Federal agencies, including OSHA.
- C. Traffic signs, barricades, warning lights, and all necessary equipment for the protection of the traveling public shall be furnished and maintained as specified in "Part 6, Temporary Traffic Control" of the <u>Manual on Uniform Traffic Control Devices</u>, 2003 Edition by the Federal Highway Administration.
- D. Temporary Fencing: Provide at the discretion of the Contractor to protect and secure the Site or any portion of the Site. Comply with ASTM A392-96, Standard Specifications for Zinc-Coated Chain Link Fence.
 - 1. Fence shall be 6-foot high galvanized steel chain link fencing with galvanized steel frame and woven wire mesh fabric.
 - 2. Post stands and ballast for each fence panel shall be of adequate size and weight to adequately support the fence on the ground surface in a stable/secure location throughout the construction period. Posts shall not impact existing pavement.
- E. Concrete Barrier: Provide at the discretion of the Contractor. Barriers shall meet the requirements of Temporary Concrete Barrier as defined by the New York State Department of Transportation (NYSDOT) Standard Sheet No. M519-3R1.

- F. Liquid Waste Storage Facilities: Provide tanks or drums of adequate size to store liquid waste generated from excavation pump outs; decontamination facilities; collected leachate from within the existing solid waste boundary; collected well drilling and development water; and/or spilled or leaked liquid contents of buried drums until characterization and off-site disposal can occur.
- G. Engineer's Office: Provide a heated/cooled office trailer of the size compatible with on-site available space but no less than 35 feet in length. Furnish, at a minimum with a desk, 2 chairs, file cabinet, folding table, and water cooler. Provide temporary electric service to the office to handle the load of the heating and cooling system.
- H. Temporary Portable Truck Scale: Provide a single or multiple axle truck scale suitable for weighing imported and exported loaded trucks from the Site.

PART 3 - EXECUTION

3.01 PERFORMANCE

- A. Field Office, Storage Trailers, or Buildings: Sited in approved locations and properly set up for all anticipated weather conditions.
- B. Sanitary Conveniences for Project Personnel:
 - 1. Provide and maintain in sufficient numbers, for the use of all persons employed on the work. Site at suitable locations, screened from public observation, in accordance with State and local ordinances.
 - 2. Rigorously enforce the use of the approved sanitary facilities provided.
 - 3. When no longer required, remove from the Site and properly dispose of the contents.
- C. Provide sufficient drinking water for all employees from approved potable sources.
- D. Obey and enforce other local sanitary regulations and orders, taking such precautions against infectious diseases as may be deemed necessary.
- E. Conduct operations in a manner which, with the use of proper equipment provides maximum safety for workmen and the traveling public.

3.02 DECONTAMINATION FACILITIES

- A. Construct as required to facilitate the cleaning of equipment and trucks prior to leaving the Site. Locate as close to the active work as possible to prevent tracking of contaminated material beyond the new solid waste boundary.
- B. Decontamination methods shall be submitted for review and approval of the Engineer, but should at a minimum provide the following:

- 1. A means to protect the surroundings from migration of wastes and contaminants associated with wastes during cleaning.
- 2. Collection and containment of decontamination liquid and solid wastes.
- C. Collected liquid waste from the decontamination facilities shall be stored in a liquid waste storage facility until characterization, treatment, transportation, and disposal.
- Liquid waste treatment, transportation, and disposal shall occur as described in Section 02110 - Waste Removal and Handling and Section 02120 - Off-Site Transportation and Disposal.
- E. Demolish and properly dispose of the Decontamination facilities off-site in accordance with all applicable regulations upon completion of the project.

3.03 TEMPORARY EROSION AND SEDIMENTATION CONTROLS

A. Temporary erosion and sedimentation controls shall be located, installed, and maintained as shown on the Construction Contract Drawings and described in Section 02370 - Erosion and Sedimentation Control.

DUST AND ODOR CONTROL

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall execute the Work by methods that minimize the generation of dust and nuisance odors. The Contractor shall employ dust control measures to minimize the creation of airborne dust during execution of the Work. At a minimum, standard dust control techniques shall be employed in areas of heavy equipment traffic such as watering down the site. The dust control measures will be such that, at a minimum, air quality is in compliance with applicable OSHA regulations.
- B. The Contractor shall provide an odor control system to control odors as necessary to address complaints from the local community. Odor control agents such as an odor-control foam, misting system, or other method selected by the Contractor and approved by the Engineer shall be available on site and shall be applied as needed to control nuisance odors. At a minimum, an odor control foam system shall be available on site. Other systems may be required as necessary to meet the project performance objectives.
- C. The performance objective for odor control will be to control, eliminate, or mask any odors that generate complaints, from neighboring residents, the public, state or local officials, or the Engineer.
- D. No additional payments will be made due to shutdowns as a result of emissions whether exceeding standards or posing a nuisance. If the initial emission controls are found to be inadequate, the Contractor shall provide additional measures at no additional cost.
- E. Dust and odor control systems shall be implemented as necessary to meet local, state, and/or federal regulations for air emissions and dust and to control nuisance odors.
- F. Sufficient volumes of water and/or odor control foam shall be readily available or stored on site to address continuous application as necessary.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Standard Specification 00003 Minimum Requirements for Health and Safety
- B. Section 01352 Environmental Protection Procedures
- C. Section 02370 Erosion and Sedimentation Control

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Water shall be free from oil, acid, and injurious alkali or vegetable matter, and other deleterious materials or contaminants. Water shall not be brackish.
- B. Odor control foam. Odor control foam shall be a biodegradable, non-flammable, and non-toxic water-based material designed for the control of VOCs, dust, and odor. It shall be capable of being spray applied to form a uniform encapsulating layer between contaminated materials and the environment, suppressing VOCs, dust, odors, and gas.

2.02 EQUIPMENT

- A. Equipment for dust and odor control shall include appropriate measures (e.g., heat tape, tank heaters) to prevent freezing or impair operation due to temperatures below freezing.
- B. Spray nozzles for water shall be capable of delivering an light spray to coat ground surfaces evenly without generating excessive runoff.
- C. Spray nozzles for odor control dispersants or misting systems shall be capable of delivering a fine airborne vapor spray to minimize immediate settling to the ground.

PART 3 – EXECUTION

3.01 SPRINKLING WATER

- A. Apply to haul roads or disturbed areas of the Site by approved methods and with equipment including a tank with gauge-equipped pressure pump and a nozzle-equipped spray bar.
- B. Disperse through the nozzle under a minimum pressure of 20 pounds per square inch, gauge pressure.
- C. Apply water until the surface is wet, but avoid ponding, run off, or muddy conditions.

3.02 PAVEMENT SWEEPING

- A. Maintain clean pavement surfaces on South Hill Road adjacent to the Site's access. Do not permit construction equipment to track soil outside of the limit of work or on public roads.
- B. Sweep pavement surfaces daily during off-site hauling operations or as requested by the Engineer to prevent migration of soil outside of the work area and to prevent the generation of dust.
- C. Sweep all paved surfaces on South Hill Road adjacent to the Site's access at the end of construction as a final cleanup task to remove any residual construction debris and soils.

3.03 STOCKPILE MANAGEMENT

A. Maintain on-site stockpiles in a manner that prevents wind-blown dust generation. During active use, provide periodic water sprinkling and during inactive periods, cover stockpiles with weighted tarps.

3.04 TESTING

A. All equipment, if not in regular use, shall be tested as requested by the Engineer.

FIELD ENGINEERING AND SURVEYING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Established survey control points are available on-site for construction purposes as described on Construction Contract Drawing G-002. The Contractor shall verify locations of survey control points prior to starting work. The Contractor shall safeguard all survey control points. Should any of these points be damaged or destroyed, the Contractor shall replace the control point at no cost to the Department. The Contractor shall assume the entire expense of rectifying work improperly constructed due to failure to maintain and protect such established survey control points.
- B. The Contractor shall be responsible for the layout of the construction and any additional survey control points, grid coordinate locations, lines, grades, and levels necessary for the proper construction and testing of the work required in the Contract Documents. Survey control shall be used at a minimum to maintain established layout, specified slopes, specified depths, and specified thicknesses.
- C. The Contractor shall employ a surveyor using standard practices and datum for the State of New York to provide the surveying functions necessary for the proper execution of the work, to provide measurement for payment, and to document and record the final completed work.
- D. The Contractor is responsible for scheduling the surveys to coincide with construction activities. If the survey documentation shows improper locations, slopes, elevations, or layer thicknesses, the Contractor shall correct the deficiency and re-survey the re-work at no additional cost to the Department. Survey documentation may include, but not be limited to:
 - 1. Initial field verification survey, as described in Sub-Part 1.03;
 - 2. New solid waste boundary.
 - 3. Horizontal and vertical extents of waste excavation between the existing and new solid waste boundaries for the purpose of volume calculations;
 - 4. Location and inverts of installed culverts and detention basin outlet structures;
 - 6. Constructed drainage features including slope benches, downdrains, perimeter drainage channel, East Drainage Swale, and detention basin
 - 7. Limit of clearing/limit of work
 - 8. Final constructed topography within the limit of grading based on a 10' maximum grid pattern or as required to establish 1-foot contours;
 - 9. Location and elevation of Contractor established survey control points and/or benchmarks:
 - 10. New monitoring well locations and elevations (top of cover, top of riser, and top of casing); and

Existing monitoring well locations and elevations (top of cover, top of riser, and top of casing)

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01110 Summary of Work
- B. Section 01330 Submittal Procedures
- C. Section 01450 Contractor Quality Control
- D. Section 01770 Project Closeout Procedures

1.03 SUBMITTALS

- A. On request, submit data demonstrating qualifications of persons providing field engineering and survey services.
- B. On request, submit documentation verifying accuracy of survey work.
- C. The Contractor shall perform a field verification of survey as part of the work prior to the start of construction activities to verify/establish current conditions. The Contractor shall then compare the existing condition information shown on the Construction Contract Drawings to the current conditions determined during the field verification activities. Where discrepancies exist, the Contractor shall submit to the Engineer the results of the field verification survey and results of the comparison with the Construction Contract Drawings. All discrepancies shall be resolved by the Engineer prior to initiation of construction activities affected by discrepancies.
- D. Survey data in support of quantity measurements as required in Section 01270 Measurement for Payment
- E. Survey data and measurements as the Work progresses for the project in support of establishing As-Built Drawings and Record Drawings as specified in Section 01770 Project Closeout Procedures.

1.04 FIELD ENGINEERING AND SURVEY REQUIREMENTS

- A. Provide field engineering and survey services using appropriate construction practices. Use skilled persons, trained and experienced in the necessary tasks and techniques for the proper execution of the Work. Locate and layout the Work by survey instrumentation and similar appropriate means.
- B. The Contractor shall sufficiently establish the existing ground elevations before earthwork is started.
- C. The Contractor shall perform the layout and shall document completed construction on As-Built Drawings, including the features listed in Sub-Part 1.01D.
- D. The Contractor shall sufficiently survey to verify quantities included in requests for payment as required in Section XII, Measurement for Payment.
- E. Vertical and horizontal control shall be of sufficient accuracy and precision to assure survey work is constructed and recorded to within 0.1 foot tolerance.

F. Verification surveys, surveys for measurement and payment, and project As-Built documentation shall be provided in electronic file format compatible with AutoCAD 2007 or later and Adobe Acrobat 6.0 or later.

1.05 AMERICAN LAND TITLE ASSOCIATION (ALTA)/ AMERICAN CONGRESS ON SURVEYING AND MAPPING (ACSM) SURVEY

- A. An ALTA/ACSM Survey shall be completed by a licensed New York surveyor after the Engineer/Department grants substantial completion status to the project.
- B. The ALTA/ACSM Survey is separate from verification or as-built surveys.
- C. The survey must meet the following minimum requirements:
 - 1. The survey must bear the name, address, telephone number, signature and certification of the professional land surveyor who performed the survey, his or her official seal and registration number, the date the survey was completed, the dates of all of the surveyor's revisions.
 - 2. The survey must be certified to the People of the State of New York acting through its Commissioner of the Department of Environmental Conservation and to the Title Company.
 - 3. The survey boundaries must be drawn to a convenient scale, with that scale clearly indicated. A graphic scale, shown in feet and meters, must be included.
 - 4. The symbols and abbreviations that are used on the survey must be identified by the use of a legend.
 - 5. Diagrams must be accurately presented.
 - 6. The point of beginning of the legal description must be shown.
 - 7. The legal description must be correct.
 - 8. The legal description must state the acreage.
 - 9. If the deed(s) description differ from the measured bearings/angles/distances, both must be indicated on the survey.
 - 10. The survey must show the identifying titles of all recorded/filed maps and deeds with their appropriate recording data, filing dates and map numbers.
 - 11. The survey must show the section, block and lot/ tax map/ section numbers/letters of the surveyed premises.
 - 12. The survey must show the location of all buildings/monuments/overlaps/encroachments upon the surveyed property with their locations defined by measurement perpendicular to the nearest perimeter boundaries.
 - 13. The survey must show all observable evidence of easements and or servitudes and underground easements and or servitudes with their recording information (such as those created by roads, right-of-way, water courses, drains, telephone, telegraph, or electric lines, water sewer, gas cable lines or oil or gas pipelines, on or across the surveyed property and on adjoining properties if they appear to affect the surveyed property) or any easements of record which may, based upon their location or use, impair or otherwise limit proposed development.
 - 14. The survey must note any "blanket floating" or otherwise undefined or unlocated easements.

- 15. The survey must depict the location of visible improvements within five feet of each side of property boundary lines.
- 16. The survey must provide a path of legal access for ingress and egress to and from the site for the Grantee, its agents, employees or other representative of the State to use to access the Site.
- 17. The survey must show ponds, lakes, springs, rivers or a natural water boundary bordering on or running through the surveyed property; the survey must measure the location of the natural water boundary and note on the survey the date of the measurement.
- 18. The survey must correctly depict the area(s) of wetlands; restricted use zones.
- 19. The survey must correctly depict the environmental easement area with corresponding metes & bounds description and acreage.
- 20. The survey should clearly state "Environmental Easement Description" with the DEC site number next to it.
- 21. If the survey consists of more than one sheet, sheets must be numbered and the total number of sheets must be indicated on each sheet.
- 22. The survey must depict the area affected by engineering controls with corresponding metes and bounds with acreage, measurements with description of the engineering control for example OU 1, OU 2 or Soil Management Plan Area, Sub-Slab Methane/VOC system, site cap, clean fill, concrete, demarcation layer, area not under environmental control, asphalt or building structures, footprint of future buildings (where known), etc.
- 23. If the site will be subject to engineering and/or institutional controls, the survey must include the following statement: "The engineering and institutional controls for this Easement are set forth in the Site Management Plan (SMP). A copy of the SMP must be obtained by any party with an interest in the property. The SMP can be obtained from NYS department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, New York, 12233 or at derweb@gw.dec.state.ny.us". This reference must be located in a prominent place on the face of the survey and be in at least 15-point type.
- 24. The record title description of the surveyed tract and any new description prepared by the surveyor must appear on the face of the survey.

1.06 TECHNICAL REQUIREMENTS OF SURVEY

- A. Horizontal ground control shall originate and terminate on New York State Plane North American Datum 1983 (NAD 83). Vertical control shall be tied to North American Vertical Datum 1988 (NAVD 88).
- B. Map Accuracy Ninety percent of the elevations determined from the solid-line contours for the topographic maps shall have accuracy with respect to true elevation of 0.5 contour interval (0.5 foot) or better, and the remaining 10 percent of such elevations shall not be in error by more than one contour interval (1 foot).
- C. Vertical Control: Establish a permanent project benchmark for vertical control.

- D. Horizontal Control: Each horizontal control point shall be plotted on the map within the coordinate grid in which it should lie to an accuracy of one one-hundredth foot (0.01 foot) of its true position as expressed by the plane coordinates computed for this point.
- E. Spot Elevations: Survey shall be constructed to provide an accuracy of 0.1 feet vertically. No shots exceeding 500 feet shall be taken. Ninety percent of all spot elevations placed on the maps shall have an accuracy of at least 0.1 foot, and the remaining 10 percent shall not be in error by more than one-half (1/2) of the contour interval (0.5 foot).
- F. Accuracies and accuracy tests apply to the stereo compilation scale of the original manuscript (i.e., if the manuscript is compiled at a scale of 1" = 100' and then reduced to 1"=200', then the accuracies will apply to the original 1"=100' scale). This is also true if the manuscript is enlarged to 1"=50' or some larger scale.

1.07 EXISTING CONDITIONS SURVEY

A. The existing conditions depicted on the Construction Contract Drawings are based on a survey plan entitled "Boundary & Topographic Map, prepared for the New York State D.E.C., Former South Hill Dump Site, Being part of Lot #100, Town of Cortlandville, County of Cortland, State of New York," by the Popli Design Group, dated January 20, 2010.

1.08 CONSTRUCTION CONTRACT DRAWINGS

A. The Engineer will supply the Contractor with electronic drawing files in AutoCAD 2010 file format. These electronic files may be used by the Contractor for calculating construction layout and as a base map for As-Built survey.

PART 2 - PRODUCTS

Not applicable.

PART 3 - EXECUTION

Not applicable.

PROJECT CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Keep accurate record documents for all additions, substitutions of material, variations in work, and any other revisions to the Contract Documents.
- B. Provide a final survey of project Site and as-built drawings of the completed work.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01330 Submittal Procedures
- B. Section 01720 Field Engineering and Surveying

1.03 PROJECT CLOSEOUT

- A. The Contractor shall comply with the procedures stated in the General Conditions of the Contract for issuance of Certificate of Substantial Completion.
- B. The Contractor shall submit written certification that that the Work is substantially complete in accordance with Contract Documents and ready for the New York State Department of Environmental Conservation's (the Department's) inspection/review.
- C. Provide submittals as required by these Specifications.

1.04 FINAL CLEANING

- A. Execute final cleaning of Site prior to final project inspection.
 - 1. Clean and remove debris from drainage systems including drainage channels, the East Drainage Swale, and Detention Basin.
 - 2. Clean pavement of South Hill Road, as required, by sweeping.
 - 3. Repair any project-related damage to South Hill Road and/or Town right-of-way in accordance with Town specifications.
 - 4. Remove surplus materials, site trash, any remaining waste materials, and temporary facilities and controls from the Site.

1.05 WARRANTIES

- A. Provide duplicate notarized copies of all warranties associated with the work.
- B. Execute and assemble transferable warranty documents from subcontractors, suppliers, and manufacturers.
- C. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within 14 business days after acceptance, listing the date of acceptance as start of warranty period.

1.06 MAINTENANCE OF RECORD DOCUMENTS

- A. Record documents shall be stored in a dry, safe place apart from Construction Documents, and be available for inspection by the Engineer. The record documents shall not be used for construction purposes.
- B. Clearly label each document "Project Record." During the execution of the work, keep record documents current.
- C. Provide files and racks for storage of documents.
- D. Maintain one copy of the following documents at the job site:
 - 1. Construction Contract Drawings to:
 - a. record changes associated with contract addenda;
 - b. indicate progress of work;
 - c. record field changes of dimension and detail;
 - d. record changes associated with executed Change Orders and Field Orders; and
 - e. depict information or details not originally shown.
 - 2. Specifications marked up to include corrections, changes, or revisions associated with contract addenda, Change Orders, and Field Orders;
 - 3. Addenda;
 - 4. Reviewed submittals;
 - 5. Change Orders;
 - 6. Other modifications to the Contract;
 - 7. Health and Safety Plan;
 - 8. Construction Quality Control Plan
 - 9. Construction Work Plan, and other specific work plans;
 - 10. Applicable permit documents;
 - 11. Contractor's certifications;
 - 12. Shop drawings and product data;
 - 13. Daily reports, including:
 - a. Records of all site work;
 - b. Inspection records; and
 - c. Reports on any emergency response actions.

- 14. Construction photographs;
- 15. Deficiency reports;
- 16. Sampling documentation, chain of custody forms, and waste manifests;
- 17. All analytical laboratory testing data;
- 18. Air monitoring data;
- 19. All geotechnical laboratory testing data and construction materials field/laboratory testing reports;
- 20. Quality Control Project Summary, compiled upon project completion;
- 21. Field notes and records of quantities for progress payments;
- 22. All survey data required for measurement and payment;
- 23. Operations and maintenance manuals for all equipment installed;
- 24. As-Built survey information; and
- 25. Contractor and Subcontractor certified payrolls.

1.07 SUBMITTALS

- A. At the completion of construction, the Contractor shall deliver one (1) electronic and one (1) paper set of project record documents to the Engineer as a condition of final payment. Submit project record documents in accordance with Section 01330 Submittal Procedures, and as specified herein.
- B. Accompany the project record documents with a transmittal letter containing the following:
 - 1. Date;
 - 2. Project title and number:
 - 3. Contractor's name and address:
 - 4. Title and number of each record;
 - 5. Certification that each document as submitted is complete and accurate; and
 - 6. Signature of the Contractor or his authorized representative.
- C. A directory listing the names, addresses, and telephone numbers of the Contractor, subcontractors, and major equipment suppliers.
- D. Operation and maintenance instructions for installed materials and equipment.
- E. All other outstanding project documentation including but not limited project submittals and test data.

1.08 FINAL (AS-BUILT) SURVEY

- A. The Contractor shall perform a topographic and location survey of the Site at the completion of construction. The survey shall be performed by a Land Surveyor registered in the State of New York. The survey shall include all items listed in Section 01720 Field Engineering and Surveying, Sub-Part 1.01D.
- B. Provide as-built survey data in electronic format compatible with AutoCAD 2007 (or later version) computer software.
- C. Provide an electronic portable document format (pdf) file of the surveyor's final as-built survey drawing.

1.09 ALTA SURVEY

A. Provide an ALTA/ACSM Survey in accordance with Section 01720 – Field Engineering and Surveying.

SECTION 02073

GEOTEXTILES

PART 1 - GENERAL

1.01 DESCRIPTION

A. Furnish and install nonwoven geotextile as shown on the Construction Contract Drawings and as specified in this Section.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01330: Submittal Procedures

B. Section 02300: Earthwork

1.03 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- 1. ASTM D 4354 (1999) Standard Practice for Sampling of Geosynthetics for Testing
- 2. ASTM D 4355 (1999) Standard Test Method for Deterioration of Geotextiles from Exposure to Ultraviolet Light and Water (Xenon-Arc Type Apparatus)
- 3. ASTM D 4491 (1999) Standard Test Methods for Water Permeability of Geotextiles by Permittivity
- 4. ASTM D 4533 (1996) Standard Test Method for Trapezoid Tearing Strength of Geotextiles
- 5. ASTM D 4595 (2001) Standard Test Method for Tensile Properties of Geotextiles by the Wide-Width Strip Method
- 6. ASTM D 4632 (1997) Standard Test Method for Grab Breaking Load and Elongation of Geotextiles
- 7. ASTM D 4751 (1999) Standard Test Method for Determining Apparent Open Size of a Geotextile
- 8. ASTM D 4833 (2000) Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products
- 9. ASTM D 4873 (1997) Standard Guide for Identification, Storage, and Handling of Geosynthetic Rolls
- 10. ASTM D 4884 (1996) Standard Test Method for Strength of Sewn or Thermally Bonded Seams of Geotextiles

1.04 SUBMITTALS

- A. Product Data: Submit geotextile manufacturer's specifications
- B. Manufacturer's Quality Control Certifications: Provide quality control certifications for the same lot of material and production (day and shift) as rolls provided to the project verifying conformance with these specifications.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Geotextile:

Geotextile shall be composed of synthetic fibers formed into nonwoven fabric. Fibers used in manufacture of the geotextiles shall consist of polypropylene, polyvinyl chloride, nylon, polyolefins, polyamides, or polyester. The fibers shall be formed into network such that the filaments or yarns retain dimensional stability relative to each other, including selvages. The geotextile shall contain stabilizers and/or inhibitors to make the fibers resistant to deterioration resulting from exposure to sunlight, water, or heat. The geotextile shall be free of defects or flaws which will affect the physical properties. Provide a geotextile meeting the properties of Table 02073-1:

Table 02073-1: Required Physical Properties of Nonwoven Geotextile

Property	Test Method	Nonwoven
Tensile Strength (lbs)	D 4632	200
Elongation (%)	D 4632	50
Puncture Strength (lbs)	D 4833	90
Trapezoid Tear (lbs)	D 4533	75
Permittivity (sec ⁻¹)	D 4491	0.50
Ultraviolet Stability		70
(% for min. 500 hrs)	D 4355	
Apparent Opening Size		70
(AOS) (standard sieve)	D 4751	

Table Notes:

- 1. All numerical values except AOS and ultraviolet stability represent minimum average roll values (MARV), in the weaker principal direction.
- 2. AOS value is a maximum average roll value or MaxARV.
- 3. Ultraviolet stability is measured as a minimum average percentage.

PART 3 - EXECUTION

3.01 APPLICATION

A. Geotextile shall be installed between excavated subgrade and stone/riprap.

3.02 SURFACE PREPARATION

A. Surfaces on which the geotextile will be placed shall be prepared to a relatively smooth surface condition. Surfaces shall be free from obstruction, debris, depressions, erosion feature, or vegetation. Any irregularities shall be removed so as to ensure continuous, intimate contact of the geotextile with the surface. Any loose material, soft or low density pockets of material, will be removed, filled with suitable subgrade fill, and compacted. Erosion features such as rills and gullies must be graded out of the surface before geotextile placement.

3.03 INSTALLATION

A. Geotextile Fabrics:

- 1. Place in the manner and at the locations shown on the Construction Drawings.
- 2. Prior to installation, fabric delivered to the site not meeting the requirements outlined in section 2.01 of this Specification shall be rejected.
- 3. At the time of installation, fabric shall be rejected if it has defects, rips, holes, flaws, deterioration or damage incurred during manufacture, transportation or storage.
- 4. Place with the long dimension parallel to the centerline of the underdrain pipes and lay smooth and free of tension, stress, folds, wrinkles, or creases.
- 5. Provide a minimum width of 12 in. of overlap for bedding fabric applications.
- 6. In the presence of wind, weight the materials with sandbags until final covers are installed.
- 7. Care shall be taken to assure that any underlying materials are not damaged during placement of geotextiles.
- 8. Care shall be taken to assure that stones, mud, and dirt are not entrapped in the geotextile during placement and seaming operations.
- 9. Overlap joints and seams shall be measured as a single layer of cloth.
- 10. The fabric shall be turned down and buried a minimum of 2 feet at all exterior limits or as indicated on the Construction Drawings.
- 11. Place so that the upstream strip of fabric will overlap the downstream strip.
- 12. Protection of Fabrics:
 - a. Exercise necessary care while transporting, storing and installing the fabric to prevent damaging it.
 - b. Protect from prolonged direct exposure to sunlight.
 - c. Repair all damaged areas of the fabric by placing another piece of fabric of sufficient size to extend a minimum of 1.0 foot beyond the limits of the damage in all directions over the damaged area. Sew repairs as described below.
 - d. Do not leave exposed more than 45 days without being covered by backfill.
 - e. When required, sew overlaps and repairs to damaged fabric using a portable machine to provide a seam strength of at least 90 percent of the filter fabric strength.
 - f. Geotextile shall not be exposed to precipitation prior to being installed. Wrappings protecting geotextile rolls shall be removed less than one hour prior to unrolling the geotextile.

g.	In no case shall any type of equipment be allowed on an unprotected
	geotextile.

13. Bridging of fabric is not allowed.

END OF SECTION

SECTION 02105

CHEMICAL SAMPLING AND ANALYSIS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. The Contractor shall provide all necessary personnel, equipment, materials, and subcontracting required to perform chemical sampling and analysis associated with the remedial action at the South Hill Dump Site in Cortlandville, New York. The sampling and analyses shall be conducted for:
 - 1. Off-Site Disposal
 - a. Waste characterization of drum contents and associated visually impacted soil to be disposed off-site.
 - Waste Characterization of construction water to be disposed off-site.
 Construction water to be discharged to on-site surface water or groundwater shall meet the discharge requirements specified in Section 02245 Construction Water Management.
 - 2. On-Site Remediation, Consolidation, and Use
 - a. Confirmation testing of the limit of excavation (horizontal and vertical) outside of the new solid waste boundary.
 - b. Documentation testing in areas where intact drums and associated visually impacted soil have been removed from the existing landfill or surrounding area
 - c. Borrow Source testing of imported materials for use in remedial action construction.
- B. The sampling and analysis shall be conducted in accordance with USEPA and New York State Department of Environmental Conservation (the Department) standards and requirements for environmental sampling and analysis.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01330 Submittal Procedures
- B. Section 01450 Contractor Quality Control
- C. Section 02110 Waste Removal and Handling
- D. Section 02120 Off-Site Transportation and Disposal
- E. Section 02245 Construction Water Management
- F. Section 02300 Earthwork

1.02 REFERENCES

- A. New York State Department of Environmental Conservation "Analytical Services Protocol." (NYSDEC ASP) June 2000 revised July 2005.
- B. New York State Department of Environmental Conservation "Technical Guidance for Site Investigation and Remediation"; DER-10 (NYSDEC DER-10); May 3, 2010.
- C. Guidance for the Development of Data Usability Reports; Division of Environmental Remediation; September 1997.

1.03 SUBMITTALS

- A. Quality Assurance Project Plan:
 - 1. Submit the following two weeks prior to start of the work:
 - a. Site-specific Quality Assurance Project Plan (QAPP) prepared in accordance with NYSDEC DER-10
 - b. Proposed Project Analytical Laboratory and certifications. Documentation shall be provided that the analytical laboratory is New York State Department of Health certified for solid and hazardous waste analyses.
- B. Preliminary Laboratory Analysis Results:
 - 1. Provide preliminary (verbal) laboratory analysis results for the following:
 - a. Confirmatory sample testing results.
- C. Sampling and Analysis Reports:
 - 1. Submit the following reports:
 - a. Field sampling data records including copies of completed field sheets, chain-of-custodies, and field log book entries;
 - b. Laboratory Data Deliverable;
 - c. Data Usability Summary Report (DUSR).

1.04 DEFINITIONS

- A. Composite Sample: a combination of three (3) to five (5) discrete samples collected at random locations and mixed into a single sample for the purpose of analytical testing.
- B. Confirmation Sample: a sample taken during the course of a remedial action to determine whether cleanup requirements have been achieved or whether further remediation is required. For a final delineation sample, the analysis must be by an ELAP-accredited laboratory (as defined by NYSDEC DER-10).
- C. Documentation Sample: a sample taken after remedial action is complete to document the level of contamination remaining. For a final delineation sample, the analysis must be by an ELAP-accredited laboratory (as defined by NYSDEC DER-10).
- D. Data Usability Summary Report (DUSR): a document that provides a thorough evaluation of the analytical data to determine whether or not the data, as presented, meets the site/project specific criteria for data quality and use (as defined by NYSDEC DER-10).
- E. Discrete Sample: a grab sample taken at a single location for the purpose of analytical testing.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.01 HEALTH AND SAFETY

- A. Field personnel will be required to utilize the personnel protection as defined in Contract Documents Section X, Standard Specification 00003 Minimum Requirements for Health and Safety.
- B. Contractor personnel will be required to review the site or task-specific Health and Safety Plan prepared for this project and acknowledge that they have done so before initiating subsurface work.

3.02 WASTE CHARACTERIZATION SAMPLE COLLECTION

- A. Waste characterization samples for off-site waste disposal include:
 - 1. the contents of drums (liquid or solid);
 - 2. visually impacted soil associated with a drum; and
 - 3. construction water.
- B. Samples shall be collected at the following frequencies, as applicable:
 - 1. One (1) composite sample per drum.
 - 2. Frequency of one (1) composite sample per 1,000 cubic yards (cy) of material for Metals, Mercury, Cyanide, SVOCs, and PCBs/Pesticides testing and two (2) discrete samples per 1,000 cy for VOC testing based on the estimated volume of visually impacted soil, or identified solid waste.
 - 3. In accordance with the requirements of the receiving disposal facility as described in Section 02120 Off-Site Transportation and Disposal.
- C. The required volume, containerization methods, and sample preservation methods shall be as directed by the Project Analytical Laboratory. Turn-around time for laboratory analytical results shall be 24 hours

3.03 DOCUMENTATION SOIL SAMPLE COLLECTION

- A. Documentation soil samples shall be collected from the exposed bottom of excavation where drums or drums and associated visually impacted soil have been removed.
- B. Samples shall be collected from the bottom of the excavation at rate of one sample per 3,600 square feet of bottom area.
- C. Samples shall be collected using a hand auger, trowel, or spoon to obtain the necessary volume of soil for each sample.
- D. The required volume, containerization methods, and sample preservation methods shall be as directed by the Project Analytical Laboratory. Turn-around time for laboratory analytical results shall be 14-days.

3.04 CONFIRMATION SOIL SAMPLE COLLECTION

- A. Confirmation soil samples shall be collected from the exposed sidewall and bottom of excavation between the existing and new solid waste boundaries.
- B. Samples shall be collected from the sidewall of the excavation at a rate of one sample per 60 linear feet of excavation sidewall, and taken from the bottom of the excavation at rate of one sample per 3,600 square feet of bottom area.
- C. Samples shall be collected using a hand auger, trowel, or spoon to obtain the necessary volume of soil for each sample.
- D. The required volume, containerization methods, and sample preservation methods shall be as directed by the Project Analytical Laboratory. Turn-around time for laboratory analytical results shall be 24-hours to limit the time excavations remain open.

3.05 IMPORTED BORROW SOURCE SOIL SAMPLE COLLECTION

- A. Imported borrow source soil samples shall be collected from the borrow source (off-site borrow pit bank or stockpile) prior to delivery of the material to the Site for incorporation into the Work as part of the remedial action.
- B. Imported materials with a gradation of 10% or less by weight passing the number 80 sieve as determined by ASTM D 422 can be imported without chemical sampling and analysis consistent with NYSDEC DER-10 Paragraph 5.4(e)(5).
- C. Frequency of one (1) composite sample per 1,000 cubic yards (cy) for Metals, Mercury, Cyanide, SVOCs, and PCBs/Pesticides testing and two (2) discrete samples per 1,000 cy for VOC testing based on the estimated volume of imported material At a minimum, one sample shall be collected per each borrow source.
- D. Samples shall be collected using a hand auger, trowel, or spoon to obtain the necessary volume of soil for each sample.
- E. The required volume, containerization methods, and sample preservation methods shall be as directed by the Project Analytical Laboratory. Turn-around time for laboratory analytical results shall be coordinated with the material use requirements for the project.
- F. The Engineer/Department may request access to and observation of off-site borrow source sample collection. The Engineer/Department reserves the right to sample and test material delivered to Site for quality assurance purposes.

3.06 LABORATORY ANALYSIS

- A. Soil samples for waste characterization testing, documentation soil testing, confirmation soil testing, and borrow source soil testing shall be analyzed by the Project Analytical Laboratory in accordance with NYSDEC ASP for the following:
 - 1. Target analyte list (TAL) metals using USEPA Method 6010B;
 - 2. Mercury using USEPA Method 7471B;
 - 3. Cyanide using USEPA Method 9010 or equivalent;
 - 4. Target compound list (TCL) VOCs using USEPA Method 8260;
 - 5. TAL SVOCs using USEPA Method 8270C; and
 - 6. TAL Pesticides/PCBs using Method 8081/8082

- B. Laboratory analyses for documentation soil samples and for confirmation soil samples shall include Category B deliverables as defined in the NYSDEC ASP.
- C. In addition to the requirements in Sub-Part 3.06A, waste characterization soil samples shall be analyzed for any additional constituents required by the designated disposal facility.
- D. Construction water samples for waste characterization testing shall be analyzed by the Project Analytical Laboratory in accordance with NYSDEC ASP for the constituents required by the designated disposal facility.

3.07 REPORTING

- A. The Contractor shall prepare a Data Usability Summary Report(s) (DUSR) following the "Guidance for Data Deliverables and the Development of Data Usability Reports provided in Appendix 2B of the NYSDEC DER-10 and included as Attachment 02105-1.
- B. A DUSR shall be prepared for documentation soil samples specified in Sub-Part 3.03 and for confirmation soil samples specified in Sub-Part 3.04.

3.08 ANALYTICAL TEST RESULT EVALUATION

- A. Waste Characterization soil and water sample analytical results shall be compared to the allowable limits for waste acceptance specific to the permitted disposal facility designated to receive the waste.
- B. Confirmation soil samples shall be compared to the applicable chemical-specific standards, criteria, and guidance values (SCGs) for the project's on-site material the Restricted Use Soil Cleanup Objectives, "Restricted Residential Use" classification provided in 6 NYCRR Part 375 Table 375.6.8(b) and included as Attachment 02105-2.
- C. Documentation soil samples shall be reported and included with the project record documents for the Site. No comparison to cleanup criteria is required.
- D. Borrow source soil samples shall be compared to the applicable chemical-specific standards, criteria, and guidance values (SCGs) for the project's imported material the Unrestricted Use Soil Cleanup Objectives provided in 6 NYCRR Part 375 Table 375.6.8(a) and included as Attachment 02105-3.

3.09 ACCEPTANCE OF ANALYTICAL RESULTS AND CORRESPONDING ACTION

- A. The Engineer/Department will review the analytical results and the associated DUSR submitted and based on the information, indicate approval and/or provide direction to the Contactor.
- B. Waste characterization analytical results require the review and approval of the designated off-site disposal facility.
- C. Confirmation samples not meeting the SCGs established for on-site material verify that the soil cleanup objective has not been met. Additional excavation in accordance with Section 02300 Earthwork and then additional confirmation testing shall be required to remove additional impacted material.
- D. Borrow source samples not meeting the SCGs established for imported material indicate that the material is impacted and requires a restricted use. Imported materials requiring a restricted use will be rejected by the Engineer/Department. The Contractor shall identify

a new source and complete new borrow source testing to qualify the material for project use.

3.10 DISPOSAL OF WORK DERIVED WASTES

A. Disposable sampling equipment and personnel protective equipment (PPE) associated with sample collection shall be classified as remediation waste and handled as described in Section 02110 – Waste Removal, Handling, and Storage and Section 02120 – Off-Site Transportation and Disposal.

3.11 DECONTAMINATION

A. Contaminated sampling equipment will be washed with a Liquinox ®, or equivalent soap and water solution, rinsed with clean potable water, and finally rinsed with deionized water.

END OF SECTION

Attachment 02105-1

6 NYCRR Part 375 Table 375.6.8(b)

	CAS Number	Protection of Pub	Protection of	Protection of			
Contaminant		RESIDENTIAL	Restricted- Residential	Commercial	Industrial	Ecological Resources	Ground- water
Metals							
Arsenic	7440-38- 2	16 ^f	16 ^f	16 ^f	16 ^f	13 ^f	16 ^f
Barium	7440-39- 3	350 ^f	400	400	10,000 ^d	433	820
Beryllium	7440-41- 7	14	72	590	2,700	10	47
Cadmium	7440-43- 9	2.5 ^f	4.3	9.3	60	4	7.5
Chromium, hexavalent	18540- 29-9	22	110	400	800	1 ^e	19
Chromium, trivalent ^h	16065- 83-1	36	180	1,500	6,800	41	NS
Copper	7440-50- 8	270	270	270	10,000 ^d	50	1,720
Total Cyanide h		27	27	27	10,000 ^d	NS	40
Lead	7439-92- 1	400	400	1,000	3,900	63 ^f	450
Manganese	7439-96- 5	2,000 ^f	2,000 ^f	10,000 ^d	10,000 ^d	1600 ^f	2,000 ^f
Total Mercury		0.81 ^j	0.81 ^j	2.8 ^j	5.7 ^j	0.18 ^f	0.73
Nickel	7440-02- 0	140	310	310	10,000 ^d	30	130
Selenium	7782-49- 2	36	180	1,500	6,800	3.9 ^f	4 ^f

	CAS	Protection of Pub	olic Health			Protection of	Protection
Contaminant	Number	RESIDENTIAL	Restricted- Residential	Commercial	Industrial	Ecological Resources	of Ground- water
Silver	7440-22- 4	36	180	1,500	6,800	2	8.3
Zinc	7440-66- 6	2200	10,000 ^d	10,000 ^d	10,000 ^d	109 ^f	2,480
PCBs/Pesticides							
2,4,5-TP Acid (Silvex)	93-72-1	58	100 ^a	500 ^b	1,000°	NS	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 ^e	17
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 ^e	136
4,4'-DDD	72-54-8	2.6	13	92	180	0.0033 ^e	14
Aldrin	309-00-2	0.019	0.097	0.68	1.4	0.14	0.19
alpha-BHC	319-84-6	0.097	0.48	3.4	6.8	0.04 ^g	0.02
beta-BHC	319-85-7	0.072	0.36	3	14	0.6	0.09
Chlordane (alpha)	5103-71- 9	0.91	4.2	24	47	1.3	2.9
delta-BHC	319-86-8	100 ^a	100 ^a	500 ^b	1,000°	0.04 ^g	0.25
Dibenzofuran	132-64-9	14	59	350	1,000°	NS	210
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1
Endosulfan I	959-98-8	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	102
Endosulfan II	33213- 65-9	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	102
Endosulfan sulfate	1031-07- 8	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	1,000°
Endrin	72-20-8	2.2	11	89	410	0.014	0.06

	CAS Number	Protection of Pub	Protection of	Protection of			
Contaminant		RESIDENTIAL	Restricted- Residential	Commercial	Industrial	Ecological Resources	Ground- water
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1
Polychlorinated biphenyls	1336-36- 3	1	1	1	25	1	3.2
Semivolatiles							
Acenaphthene	83-32-9	100 ^a	100 ^a	500 ^b	1,000°	20	98
Acenapthylene	208-96-8	100 ^a	100 ^a	500 ^b	1,000°	NS	107
Anthracene	120-12-7	100°	100 ^a	500 ^b	1,000°	NS	1,000°
Benz(a)anthracene	56-55-3	1 ^f	1 ^f	5.6	11	NS	1 ^f
Benzo(a)pyrene	50-32-8	1 ^f	1 ^f	1 ^f	1.1	2.6	22
Benzo(b)fluoranthene	205-99-2	1 ^f	1 ^f	5.6	11	NS	1.7
Benzo(g,h,i)perylene	191-24-2	100 ^a	100 ^a	500 ^b	1,000°	NS	1,000°
Benzo(k)fluoranthene	207-08-9	1	3.9	56	110	NS	1.7
Chrysene	218-01-9	1 ^f	3.9	56	110	NS	1 ^f
Dibenz(a,h)anthracene	53-70-3	0.33 ^e	0.33 ^e	0.56	1.1	NS	1,000°
Fluoranthene	206-44-0	100°	100°	500 ^b	1,000°	NS	1,000°
Fluorene	86-73-7	100°	100°	500 ^b	1,000°	30	386
Indeno(1,2,3- cd)pyrene	193-39-5	0.5 ^f	0.5 ^f	5.6	11	NS	8.2
m-Cresol	108-39-4	100 ^a	100 ^a	500 ^b	1,000°	NS	0.33 ^e
Naphthalene	91-20-3	100 ^a	100 ^a	500 ^b	1,000°	NS	12

	CAS	Protection of Pub	Protection	Protection			
Contaminant	Number	RESIDENTIAL	Restricted- Residential	Commercial	Industrial	of Ecological Resources	of Ground- water
o-Cresol	95-48-7	100 ^a	100 ^a	500 ^b	1,000°	NS	0.33 ^e
p-Cresol	106-44-5	34	100 ^a	500 ^b	1,000°	NS	0.33 ^e
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8 ^e	0.8 ^e
Phenanthrene	85-01-8	100 ^a	100 ^a	500 ^b	1,000°	NS	1,000°
Phenol	108-95-2	100°a	100 ^a	500 ^b	1,000°	30	0.33 ^e
Pyrene	129-00-0	100°a	100 ^a	500 ^b	1,000°	NS	1,000°
Volatiles							
1,1,1-Trichloroethane	71-55-6	100°	100 ^a	500 ^b	1,000°	NS	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27
1,1-Dichloroethene	75-35-4	100°	100 ^a	500 ^b	1,000°	NS	0.33
1,2-Dichlorobenzene	95-50-1	100 ^a	100 ^a	500 ^b	1,000°	NS	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02 ^f
cis-1,2-Dichloroethene	156-59-2	59	100 ^a	500 ^b	1,000°	NS	0.25
trans-1,2- Dichloroethene	156-60-5	100 ^a	100 ^a	500 ^b	1,000°	NS	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1 ^e	0.1 ^e
Acetone	67-64-1	100 ^a	100 ^b	500 ^b	1,000°	2.2	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06
Butylbenzene	104-51-8	100°	100 ^a	500 ^b	1,000°	NS	12

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives **Protection Protection of Public Health Protection CAS** of of **Contaminant** Number Restricted-**Ecological** Ground-RESIDENTIAL Commercial **Industrial** Residential Resources water 2.4 22 44 Carbon tetrachloride 56-23-5 1.4 NS 0.76 500^{b} 108-90-7 100^a 100^{a} $1,000^{c}$ Chlorobenzene 40 1.1 49 700 0.37 Chloroform 67-66-3 10 350 12 100-41-4 390 780 Ethylbenzene 30 41 NS 1 Hexachlorobenzene 118-74-1 0.33^{e} 1.2 6 12 NS 3.2 100^a 500^{b} $1,000^{c}$ Methyl ethyl ketone 78-93-3 100^{a} 100^{a} 0.12 1634-04-500^b 0.93 Methyl tert-butyl ether 62 100^{a} 1.000^{c} NS 500^{b} 100^a $1,000^{c}$ 12 0.05 Methylene chloride 75-09-2 51 500^{b} 103-65-1 100^{a} 100^{a} $1,000^{c}$ NS 3.9 n-Propylbenzene 500^{b} sec-Butylbenzene 135-98-8 100^{a} 100^{a} 1.000^{c} NS 11 100^a 100^a 500^{b} $1,000^{c}$ 5.9 tert-Butylbenzene 98-06-6 NS Tetrachloroethene 127-18-4 5.5 19 150 300 2 1.3 500^{b} 100^{a} 100^{a} $1,000^{c}$ Toluene 108-88-3 36 0.7 Trichloroethene 21 200 400 2 0.47 79-01-6 10 1,2,4-52 380 95-63-6 47 190 NS 3.6 Trimethylbenzene 1,3,5-190 8.4 108-67-8 47 52 380 NS Trimethylbenzene 0.9 0.02 Vinyl chloride 75-01-4 0.21 13 27 NS

500^b

 1.000^{c}

 100^{a}

1330-20-

Xylene (mixed)

100^a

1.6

0.26

All soil cleanup objectives (SCOs) are in parts per million (ppm). NS=Not specified. See Technical Support Document (TSD). Footnotes

^a The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

^b The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

^c The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

^d The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

^e For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

^f For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.

^g This SCO is derived from data on mixed isomers of BHC.

^h The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

¹ This SCO is for the sum of endosulfan I, endosulfan II, and endosulfan sulfate.

^j This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.

Attachment 02105-1

6 NYCRR Part 375 Table 375.6.8(b)

	CAS Number	Protection of Pub	Protection of	Protection of			
Contaminant		RESIDENTIAL	Restricted- Residential	Commercial	Industrial	Ecological Resources	Ground- water
Metals							
Arsenic	7440-38- 2	16 ^f	16 ^f	16 ^f	16 ^f	13 ^f	16 ^f
Barium	7440-39- 3	350 ^f	400	400	10,000 ^d	433	820
Beryllium	7440-41- 7	14	72	590	2,700	10	47
Cadmium	7440-43- 9	2.5 ^f	4.3	9.3	60	4	7.5
Chromium, hexavalent	18540- 29-9	22	110	400	800	1 ^e	19
Chromium, trivalent ^h	16065- 83-1	36	180	1,500	6,800	41	NS
Copper	7440-50- 8	270	270	270	10,000 ^d	50	1,720
Total Cyanide h		27	27	27	10,000 ^d	NS	40
Lead	7439-92- 1	400	400	1,000	3,900	63 ^f	450
Manganese	7439-96- 5	2,000 ^f	2,000 ^f	10,000 ^d	10,000 ^d	1600 ^f	2,000 ^f
Total Mercury		0.81 ^j	0.81 ^j	2.8 ^j	5.7 ^j	0.18 ^f	0.73
Nickel	7440-02- 0	140	310	310	10,000 ^d	30	130
Selenium	7782-49- 2	36	180	1,500	6,800	3.9 ^f	4 ^f

	CAS	Protection of Pub	Protection of	Protection of			
Contaminant	CAS Number	RESIDENTIAL	Restricted- Residential	Commercial	Industrial	Ecological Resources	Ground- water
Silver	7440-22- 4	36	180	1,500	6,800	2	8.3
Zinc	7440-66- 6	2200	10,000 ^d	10,000 ^d	10,000 ^d	109 ^f	2,480
PCBs/Pesticides							
2,4,5-TP Acid (Silvex)	93-72-1	58	100 ^a	500 ^b	1,000°	NS	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 ^e	17
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 ^e	136
4,4'-DDD	72-54-8	2.6	13	92	180	0.0033 ^e	14
Aldrin	309-00-2	0.019	0.097	0.68	1.4	0.14	0.19
alpha-BHC	319-84-6	0.097	0.48	3.4	6.8	0.04 ^g	0.02
beta-BHC	319-85-7	0.072	0.36	3	14	0.6	0.09
Chlordane (alpha)	5103-71- 9	0.91	4.2	24	47	1.3	2.9
delta-BHC	319-86-8	100°	100 ^a	500 ^b	1,000°	0.04 ^g	0.25
Dibenzofuran	132-64-9	14	59	350	1,000°	NS	210
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1
Endosulfan I	959-98-8	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	102
Endosulfan II	33213- 65-9	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	102
Endosulfan sulfate	1031-07- 8	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	1,000°
Endrin	72-20-8	2.2	11	89	410	0.014	0.06

	CAS Number	Protection of Pub	Protection of	Protection of			
Contaminant		RESIDENTIAL	Restricted- Residential	Commercial	Industrial	Ecological Resources	Ground- water
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1
Polychlorinated biphenyls	1336-36- 3	1	1	1	25	1	3.2
Semivolatiles							
Acenaphthene	83-32-9	100°	100 ^a	500 ^b	1,000°	20	98
Acenapthylene	208-96-8	100°	100 ^a	500 ^b	1,000°	NS	107
Anthracene	120-12-7	100°	100 ^a	500 ^b	1,000°	NS	1,000°
Benz(a)anthracene	56-55-3	1 ^f	1 ^f	5.6	11	NS	1 ^f
Benzo(a)pyrene	50-32-8	1 ^f	1 ^f	1 ^f	1.1	2.6	22
Benzo(b)fluoranthene	205-99-2	1 ^f	1 ^f	5.6	11	NS	1.7
Benzo(g,h,i)perylene	191-24-2	100°	100 ^a	500 ^b	1,000°	NS	1,000°
Benzo(k)fluoranthene	207-08-9	1	3.9	56	110	NS	1.7
Chrysene	218-01-9	1 ^f	3.9	56	110	NS	1 ^f
Dibenz(a,h)anthracene	53-70-3	0.33 ^e	0.33 ^e	0.56	1.1	NS	1,000°
Fluoranthene	206-44-0	100°	100 ^a	500 ^b	1,000°	NS	1,000°
Fluorene	86-73-7	100 ^a	100 ^a	500 ^b	1,000°	30	386
Indeno(1,2,3-cd)pyrene	193-39-5	0.5 ^f	0.5 ^f	5.6	11	NS	8.2
m-Cresol	108-39-4	100 ^a	100 ^a	500 ^b	1,000°	NS	0.33 ^e
Naphthalene	91-20-3	100 ^a	100 ^a	500 ^b	1,000°	NS	12

	CAS Number	Protection of Pub	Protection of	Protection of			
Contaminant		RESIDENTIAL	Restricted- Residential	Commercial	Industrial	Ecological Resources	Ground- water
o-Cresol	95-48-7	100 ^a	100 ^a	500 ^b	1,000°	NS	0.33 ^e
p-Cresol	106-44-5	34	100 ^a	500 ^b	1,000°	NS	0.33 ^e
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8 ^e	0.8e
Phenanthrene	85-01-8	100 ^a	100 ^a	500 ^b	1,000°	NS	1,000°
Phenol	108-95-2	100 ^a	100 ^a	500 ^b	1,000°	30	0.33 ^e
Pyrene	129-00-0	100 ^a	100 ^a	500 ^b	1,000°	NS	1,000°
Volatiles			l.				
1,1,1-Trichloroethane	71-55-6	100 ^a	100 ^a	500 ^b	1,000°	NS	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27
1,1-Dichloroethene	75-35-4	100 ^a	100 ^a	500 ^b	1,000°	NS	0.33
1,2-Dichlorobenzene	95-50-1	100 ^a	100 ^a	500 ^b	1,000°	NS	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02 ^f
cis-1,2-Dichloroethene	156-59-2	59	100 ^a	500 ^b	1,000°	NS	0.25
trans-1,2- Dichloroethene	156-60-5	100ª	100ª	500 ^b	1,000°	NS	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1 ^e	0.1 ^e
Acetone	67-64-1	100 ^a	100 ^b	500 ^b	1,000°	2.2	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06
Butylbenzene	104-51-8	100 ^a	100 ^a	500 ^b	1,000°	NS	12

Table 375-6.8(b): Rest	ricted Use S	Soil Cleanup Objec	etives				
	a.a	Protection of Pub	olic Health			Protection	Protection
Contaminant	CAS Number	RESIDENTIAL	Restricted- Residential	Commercial	Industrial	of Ecological Resources	of Ground- water
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76
Chlorobenzene	108-90-7	100°	100 ^a	500 ^b	1,000°	40	1.1
Chloroform	67-66-3	10	49	350	700	12	0.37
Ethylbenzene	100-41-4	30	41	390	780	NS	1
Hexachlorobenzene	118-74-1	0.33 ^e	1.2	6	12	NS	3.2
Methyl ethyl ketone	78-93-3	100 ^a	100 ^a	500 ^b	1,000°	100 ^a	0.12
Methyl tert-butyl ether	1634-04- 4	62	100 ^a	500 ^b	1,000°	NS	0.93
Methylene chloride	75-09-2	51	100 ^a	500 ^b	1,000°	12	0.05
n-Propylbenzene	103-65-1	100 ^a	100 ^a	500 ^b	1,000°	NS	3.9
sec-Butylbenzene	135-98-8	100 ^a	100 ^a	500 ^b	1,000°	NS	11
tert-Butylbenzene	98-06-6	100 ^a	100 ^a	500 ^b	1,000°	NS	5.9
Tetrachloroethene	127-18-4	5.5	19	150	300	2	1.3
Toluene	108-88-3	100 ^a	100 ^a	500 ^b	1,000°	36	0.7
Trichloroethene	79-01-6	10	21	200	400	2	0.47
1,2,4- Trimethylbenzene	95-63-6	47	52	190	380	NS	3.6
1,3,5- Trimethylbenzene	108-67-8	47	52	190	380	NS	8.4
Vinyl chloride	75-01-4	0.21	0.9	13	27	NS	0.02
Xylene (mixed)	1330-20- 7	100°a	100 ^a	500 ^b	1,000°	0.26	1.6

All soil cleanup objectives (SCOs) are in parts per million (ppm). NS=Not specified. See Technical Support Document (TSD). Footnotes

^a The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

^b The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

^c The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

^d The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

^e For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

^f For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.

^g This SCO is derived from data on mixed isomers of BHC.

^h The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

¹ This SCO is for the sum of endosulfan I, endosulfan II, and endosulfan sulfate.

^j This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1

Attachment 02105-2

Appendix 2B New York State Department of Environmental Conservation "Technical Guidance for Site Investigation and Remediation"; DER-10; May 3, 2010

Appendix 2B Guidance for Data Deliverables and the Development of Data Usability Summary Reports

1.0 Data Deliverables

- (a) DEC Analytical Services Protocol Category A Data Deliverables:
- 1. A Category A Data Deliverable as described in the most current DEC Analytical Services Protocol (ASP) includes:
 - i. a Sample Delivery Group Narrative;
 - ii. contract Lab Sample Information sheets;
 - iii. DEC Data Package Summary Forms;
 - iv. chain-of-custody forms; and,
- v. test analyses results (including tentatively identified compounds for analysis of volatile and semi-volatile organic compounds)
- 2. For a DEC Category A Data Deliverable, a data applicability report may be requested, in which case it will be prepared, to the extent possible, in accordance with the DUSR guidance detailed below.
 - (b) DEC Analytical Services Protocol Category B Data Deliverables
- 1. A Category B Data Deliverable is includes the information provided for the Category A Data Deliverable, identified in subdivision (a) above, plus related QA/QC information and documentation consisting of:
 - i. calibration standards;
 - ii. surrogate recoveries;
 - iii. blank results;
 - iv. spike recoveries;
 - v. duplicate results;
 - vi. confirmation (lab check/QC) samples;
 - vii. internal standard area and retention time summary;
 - viii. chromatograms;

- ix. raw data files; and
- x. other specific information as described in the most current DEC ASP.
- 2. A DEC Category B Data Deliverable is required for the development of a Data Usability Summary Report (DUSR).

2.0 Data Usability Summary Reports (DUSRs)

- (a) Background. The Data Usability Summary Report (DUSR) provides a thorough evaluation of analytical data with the primary objective to determine whether or not the data, as presented, meets the site/project specific criteria for data quality and data use.
- 1. The development of the DUSR must be carried out by an experienced environmental scientist, such as the project Quality Assurance Officer, who is fully capable of conducting a full data validation. The DUSR is developed from:
 - i. a DEC ASP Category B Data Deliverable; or
- ii. the USEPA Contract Laboratory Program National Functional Data Validation Standard Operating Procedures for Data Evaluation and Validation.
- 2. The DUSR and the data deliverables package will be reviewed by DER staff. If full third party data validation is found to be necessary (e.g. pending litigation) this can be carried out at a later date on the same data package used for the development of the DUSR.
- (b) Personnel Requirements. The person preparing the DUSR must be pre-approved by DER. The person must submit their qualifications to DER documenting experience in analysis and data validation. Data validator qualifications are available on DEC's website identified in the table of contents.
- (c) Preparation of a DUSR. The DUSR is developed by reviewing and evaluating the analytical data package. In order for the DUSR to be acceptable, during the course of this review the following questions applicable to the analysis being reviewed must be answered in the affirmative.
- 1. Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?
 - 2. Have all holding times been met?
- 3. Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?
- 4. Have all of the data been generated using established and agreed upon analytical protocols?
- 5. Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?

- 6. Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?
- 7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheets from the data package been attached to the DUSR?
- (d) Documenting the validation process in the DUSR. Once the data package has been reviewed and the above questions asked and answered the DUSR proceeds to describe the samples and the analytical parameters, including data deficiencies, analytical protocol deviations and quality control problems are identified and their effect on the data is discussed.

Attachment 02105-3

6 NYCRR Part 375 Table 375-6.8(a)

375-6.8 Soil cleanup objective tables.

(a) Unrestricted use soil cleanup objectives.

Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use
	Metals	
Arsenic	7440-38-2	13 °
Barium	7440-39-3	350 °
Beryllium	7440-41-7	7.2
Cadmium	7440-43-9	2.5 °
Chromium, hexavalent e	18540-29-9	1 ^b
Chromium, trivalent e	16065-83-1	30 °
Copper	7440-50-8	50
Total Cyanide e, f		27
Lead	7439-92-1	63 °
Manganese	7439-96-5	1600 °
Total Mercury		0.18 °
Nickel	7440-02-0	30
Selenium	7782-49-2	3.9°
Silver	7440-22-4	2
Zinc	7440-66-6	109 °
I	PCBs/Pesticides	
2,4,5-TP Acid (Silvex) f	93-72-1	3.8
4,4'-DDE	72-55-9	0.0033 ^b
4,4'-DDT	50-29-3	0.0033 ^b
4,4'-DDD	72-54-8	0.0033 ^b
Aldrin	309-00-2	0.005 °
alpha-BHC	319-84-6	0.02
beta-BHC	319-85-7	0.036
Chlordane (alpha)	5103-71-9	0.094

Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use		
delta-BHC ^g	319-86-8	0.04		
Dibenzofuran ^f	132-64-9	7		
Dieldrin	60-57-1	0.005°		
Endosulfan I ^{d, f}	959-98-8	2.4		
Endosulfan II ^{d, f}	33213-65-9	2.4		
Endosulfan sulfate ^{d, f}	1031-07-8	2.4		
Endrin	72-20-8	0.014		
Heptachlor	76-44-8	0.042		
Lindane	58-89-9	0.1		
Polychlorinated biphenyls	1336-36-3	0.1		
Semivolatile organic compounds				
Acenaphthene	83-32-9	20		
Acenapthylene f	208-96-8	100 ^a		
Anthracene ^f	120-12-7	100 ^a		
Benz(a)anthracene ^f	56-55-3	1°		
Benzo(a)pyrene	50-32-8	1°		
Benzo(b)fluoranthene ^f	205-99-2	1°		
Benzo(g,h,i)perylene ^f	191-24-2	100		
Benzo(k)fluoranthene ^f	207-08-9	0.8 °		
Chrysene ^f	218-01-9	1°		
Dibenz(a,h)anthracene f	53-70-3	0.33 ^b		
Fluoranthene ^f	206-44-0	100 ^a		
Fluorene	86-73-7	30		
Indeno(1,2,3-cd)pyrene ^f	193-39-5	0.5 °		
m-Cresol ^f	108-39-4	0.33 ^b		
Naphthalene ^f	91-20-3	12		
o-Cresol ^f	95-48-7	0.33 ^b		

Table 375-6.8(a):Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use		
p-Cresol ^f	106-44-5	0.33 ^b		
Pentachlorophenol	87-86-5	0.8 b		
Phenanthrene ^f	85-01-8	100		
Phenol	108-95-2	0.33 b		
Pyrene ^f	129-00-0	100		
Volatile organic compounds				
1,1,1-Trichloroethane f	71-55-6	0.68		
1,1-Dichloroethane ^f	75-34-3	0.27		
1,1-Dichloroethene f	75-35-4	0.33		
1,2-Dichlorobenzene ^f	95-50-1	1.1		
1,2-Dichloroethane	107-06-2	0.02°		
cis -1,2-Dichloroethene f	156-59-2	0.25		
trans-1,2-Dichloroethene f	156-60-5	0.19		
1,3-Dichlorobenzene ^f	541-73-1	2.4		
1,4-Dichlorobenzene	106-46-7	1.8		
1,4-Dioxane	123-91-1	0.1 ^b		
Acetone	67-64-1	0.05		
Benzene	71-43-2	0.06		
n-Butylbenzene ^f	104-51-8	12		
Carbon tetrachloride ^f	56-23-5	0.76		
Chlorobenzene	108-90-7	1.1		
Chloroform	67-66-3	0.37		
Ethylbenzene ^f	100-41-4	1		
Hexachlorobenzene ^f	118-74-1	0.33 ^b		
Methyl ethyl ketone	78-93-3	0.12		
Methyl tert-butyl ether ^f	1634-04-4	0.93		
Methylene chloride	75-09-2	0.05		

Table 375-6.8(a):Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use
n - Propylbenzene ^f	103-65-1	3.9
sec-Butylbenzene ^f	135-98-8	11
tert-Butylbenzene ^f	98-06-6	5.9
Tetrachloroethene	127-18-4	1.3
Toluene	108-88-3	0.7
Trichloroethene	79-01-6	0.47
1,2,4-Trimethylbenzene ^f	95-63-6	3.6
1,3,5-Trimethylbenzene ^f	108-67-8	8.4
Vinyl chloride ^f	75-01-4	0.02
Xylene (mixed)	1330-20-7	0.26

All soil cleanup objectives (SCOs) are in parts per million (ppm).

Footnotes

^a The SCOs for unrestricted use were capped at a maximum value of 100 ppm. See Technical Support Document (TSD), section 9.3.

b For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

^d SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.

[•] The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

^f Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.

SECTION 02110

WASTE REMOVAL, HANDLING, AND STORAGE

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes a description of responsibilities and project requirements for on-site management of wastes including removal, handling and storage. For the South Hill Dump Site, these materials and wastes are identified as the following:
 - 1. Clearing Debris;
 - 2. Grubbings;
 - 3. Solid Waste;
 - 4. Bulky Waste;
 - 5. Construction Water;
 - 6. Visually Impacted Soils (See Section 02125 Drum and Visually Impacted Soil Removal, Handling, and Storage);
 - 7. Drums (See Section 02140 Drum and Visually Impacted Soil Removal, Handling, and Storage);
 - 8. Soil Boring Cuttings;
 - 9. Remediation Waste;
 - 10. Sanitary Waste: and
 - 11. Site Trash.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02105 Chemical Sampling and Analysis
- B. Section 02120 Off-Site Transportation and Disposal
- C. Section 02125 Drums and Visually Impacted Soil Removal, Handling, and Storage
- D. Section 02231 Clearing and Grubbing
- E. Section 02245 Construction Water Management
- F. Section 02300 Earthwork

1.02 SUBMITTALS

- A. The Contractor shall include as a component of the Construction Work Plan (described in Section 01110 Summary of Work) a description of planned means and methods for management of all waste materials removed or generated as a component of the Work.
- B. Laboratory Reports: Provide laboratory reports of analytical testing performed as required by the waste characterization program.

1.03 DEFINITIONS

- A. Clearing Debris: refer to Section 02231 Clearing and Grubbing for definition.
- B. Grubbings: refer to Section 02231 Clearing and Grubbing for definition
- C. Solid Waste: typical municipal household and/or commercial/ industrial waste in solid form and not classified as bulky waste or hazardous waste, including rubbish/trash, garbage, other miscellaneous discarded material/debris, soil, sediment, sludge, and/or ash.
- D. Bulky Waste: surficial and buried solid wastes that are large in size and difficult to breakup and incorporate into the landfill through grading and compacting including but not limited to white goods (appliances); tires and rims; construction and demolition debris; large scrap metal including junk car carcasses; large waste items (i.e. mattresses), and other items identified by the Engineer.
- E. Visually Impacted Soils: Contaminated soils adjacent to damaged/leaking buried drums uncovered during landfill waste consolidation and grading identified by observed staining, sheening, and/or the presence of tar/oily residuals. Chemical sampling and analysis is required to determine classification of material as hazardous or non-hazardous. Refer to Section 02140 Drums and Visually Impacted Soil Removal, Handling, and Storage.
- F. Drums: Surficial and buried drums, drum remnants/carcasses, and their contents. Refer to Section 02140 Drums and Visually Impacted Soil Removal, Handling, and Storage
- G. Construction Water: Wastes in liquid form collected during construction that may include construction water from dewatering activities, groundwater monitoring well development water, leachate, sediment laden stormwater runoff, and/or decontamination fluids.
- H. Chemical Liquid Wastes: Chemicals in liquid form found inside or in proximity to damaged/leaking buried drums uncovered during landfill waste consolidation and grading.
- I. Leachate Waste generated from the percolation of liquids (usually stormwater) through or contact of liquids with solid waste or contaminated soils, sediment, or sludge.
- J. Soil boring cuttings: Cuttings generated during drilling of groundwater monitoring wells
- K. Remediation Waste: Waste generated during remediation work as a result of environmental protections, worker protections and/or sampling procedures including disposable personal protective equipment (PPE), plastic sheeting, and sampling equipment.
- L. Sanitary Wastes: Wastes characterized as sanitary sewage. Refer to Section 01500 Temporary Facilities and Controls.
- M. Site trash: Waste generated during the course of construction from site workers, equipment, and/or imported materials.

1.04 WASTE CONTAINERS

A. The Contractor shall provide:

- 1. Equipment and materials as defined in Section 02140 Drum and Visually Impacted Soil Removal, Handling, and Storage for on-site handling of drums and visually impacted soil.
- 2. Trucks or other equipment as required for handling grubbings and solid waste during excavation and on-site consolidation/grading.
- 3. Appropriate containers and/or trucks for the management and off-site disposal/recycling of non-contaminated material including clearing debris and bulky wastes.
- 5. Portable, temporary storage tanks (e.g. FRAC tanks.) for the storage/treatment of collected construction water.
- 5. Containers (e.g., roll-off containers) for non-hazardous site trash collected during the course of the project and during final site cleanup activities.
- 6. Plastic bags for disposable personnel protection equipment. Plastic bags shall have a minimum thickness of six (6) mils

1.05 ON-SITE MANAGEMENT AND STORAGE OF MATERIALS

- A. The Contractor shall be responsible for proper on-site management of wastes generated in compliance with all Federal, State and local regulations. Management shall include handling, segregating, testing, and storing, as required, for the wastes listed in Sup-Part 1.01A of this Section.
 - 1. Clearing Debris: manage and store as described in Section 02231 Clearing and Grubbing
 - 2. Grubbings: manage and store as described in Section 02231 Clearing and Grubbing
 - 3. Solid Waste: material excavated/removed from outside the new solid waste boundary shall be consolidated within the boundary.
 - 4. Bulky Waste: segregate and manage material for off-site disposal.
 - 5. Construction Water: manage and store as described in Section 02245 Construction Water Management.
 - 6. Visually Impacted Soils: manage and store as described in Section 02125 Drum and Visually Impacted Soil Removal, Handling, and Storage.
 - 7. Drums: manage and store as described in Section 02125 Drum and Visually Impacted Soil Removal, Handling, and Storage.
 - 8. Soil Boring Cuttings: manage and store as described in Section 02522 Groundwater Monitoring Wells.
 - 9. Remediation Waste: segregate and bag all remediation waste separately from other Site Trash and store in the on-site Site Trash container.
 - 10. Sanitary Wastes: manage as described in Section 1500 Temporary Facilities and Controls.

- Site Trash: manage and store on-site during construction in a designated roll-off container or similar.
- B. The Contractor shall be responsible for movement of the containers, trucks, etc. into positions required for proper loading and management of material.
- C. The Contractor shall segregate hazardous from non-hazardous materials as required for proper off-site disposal.
- D. The Contractor shall be responsible for loading all waste containers, trucks, etc. with all removed waste, debris, and soil.
- E. The Contractor shall limit stockpiling of waste materials on-site.
- F. Solid waste for on-site waste consolidation, if stockpiled, shall be maintained inside the new solid waste boundary.
- F. The Contractor shall not load waste containers, trucks, etc. with non-contaminated materials prior to inspection and determination by the Engineer that decontamination of the waste containers has been achieved.
- G. The Contractor shall be responsible for coordinating the schedule for delivery and pickup of supplied waste containers. The Contractor shall also be responsible for movement and storage of containers within the Site to allow the progress of the Work.
- H. The Contractor shall cover any waste stockpiles with plastic sheeting and anchoring system to prevent stormwater runoff from contacting the waste material.

1.06 WASTE CHARACTERIZATION SAMPLING AND TESTING

- A. Testing shall not be required for the following classifications of wastes:
 - 1. Clearing Debris;
 - 2. Grubbings:
 - 3. Solid Waste consolidated on-site;
 - 4. Bulky Wastes;
 - 5. Soil Boring Cuttings;
 - 6. Remediation Waste;
 - 7. Sanitary Waste; and
 - 8. Site Trash.
- B. The Contractor shall be responsible for the sample collection and laboratory testing of the following classifications of wastes:
 - 1. Construction Water;
 - 2. Visually Impacted Soil;
 - 3. Solid Waste disposed off-site; and
 - 4. Drum contents.
- C. The Contractor shall collect samples and perform testing in accordance with the in accordance with Section 02105 Chemical Sampling and Analysis and in coordination with the off-site disposal facility and the Engineer.

- D. Laboratory testing of wastes shall be performed by a certified laboratory as required by the selected disposal facility:
 - 1. Laboratory reports shall be prepared by the subcontracted laboratory to include all requirements of the State.
 - 2. All laboratory test methods and frequencies shall be in accordance with the Department requirements.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

END OF SECTION

SECTION 02120

OFF-SITE TRANSPORTATION AND DISPOSAL

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes a description of requirements and responsibilities for proper transportation and disposal of waste materials removed and identified for off-site disposal including the following materials:
 - 1. Clearing Debris (as limited in Section 02331 Clearing and Grubbing);
 - 2. Grubbings (as limited in Section 02331 Clearing and Grubbing);
 - 3. Bulky Waste;
 - 4. Construction Water;
 - 5. Visually Impacted Soil Associated with Drums;
 - 6. Excess on-site waste consolidation solid waste (exceeds the available on-site landfill capacity);
 - 7. Drums:
 - 8. Remediation Waste;
 - 9. Sanitary Waste; and
 - 10. Site Trash.
- B. Work not covered by this specification includes the on-site transportation of wastes/wastes materials and on-site disposal in the landfill as defined by the new solid waste boundary. These wastes/waste materials including the following:
 - 1. Clearing Debris (as limited in Section 02331 Clearing and Grubbing);
 - 2. Grubbings (as limited in Section 02331 Clearing and Grubbing);
 - 3. Existing Solid Waste including excess soil from waste consolidation and subgrade excavations; and
 - 4. Soil Boring Cuttings.
- C. The Contractor shall properly transport and dispose of all items, which can be generally classified as solid and liquid hazardous and nonhazardous wastes removed from the site, to appropriate disposal facilities. This includes existing wastes as well as the wastes generated by the Contractor during construction.
- D. The Contractor shall be responsible and will be held accountable for assuring that all sampling, analysis, transportation, and disposal requirements of the Treatment, Storage and/or Disposal Facility (TSDF), Solid Waste Management Facility (SWMF), Publicly Owned Treatment Works (POTW), reclamation/recycling/salvage facilities, Federal, State, and local governments are complied with and properly documented.

E. The Contractor shall video the local roads proposed for use as haul routes to transport waste to off-site disposal prior to the initiation of work. The video shall be recorded to document the existing condition of all local roads prior to being exposed to project traffic.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01110 Summary of Work
- B. Section 01330 Submittal Procedures
- C. Section 01352 Environmental Protection Procedures
- D. Section 02105 Chemical Sampling and Analysis
- E. Section 02110 Waste Removal, Handling, and Storage

1.02 REFERENCES

- A. The publications listed below are pertinent in whole or part to the Work. The publications are referred to within the text by basic designation only.
 - 1. Code of Federal Regulations (CFR)
 - a. 40 CFR 262: Standards Applicable to Generators of Hazardous Waste
 - b. 49 CFR 172: Tables, Hazardous Material Communication Requirements, and Emergency Response Information Requirements
 - 2. New York Codes, Rules, and Regulations (NYCRR)
 - a. 6 NYCRR 364: Waste Transportation Permits
 - b. 6 NYCRR 372: Hazardous Waste manifest System and Related Standards for Generators, Transporters, and Facilities
- B. The CONTRACTOR shall comply with all applicable Federal, State, and local requirements regarding transportation and disposal of hazardous and nonhazardous material.

1.03 SUBMITTALS

- A. The Contractor shall include as a component of the Construction Work Plan (described in Section 01110 Summary of Work) a description of planned means and methods for transporting and disposing of all waste materials removed from the Site or generated as a component of the Work. The description shall include:
 - 1. Locations of all identified TSDFs, SWMFs, and/or reclamation/recycling/salvage facilities:
 - 2. The proposed haul route over local roads to each of the identified facilities.
- B. Contractor video records of the existing condition of all local roads proposed for haul
- C. Permit profile of each identified disposal facility.
- D. Bill of Lading and Manifests for all transported waste loads.
- E. Certified weight slips for each load transported to the disposal facility.

1.04 DEFINITIONS

- A. Refer to the definitions for classifications of wastes in Section 02110 Waste Removal, Handling, and Storage.
- B. Local Road: for the purpose of this specification, it shall mean those roads within the incorporated Village of McGraw and Town of Cortlandville.

1.05 WASTE CONTAINERS

A. The Contractor shall provide waste containers specific to the individual waste as described in Section 02110 – Waste Removal, Handling, and Storage.

1.06 TRANSPORTATION OF WASTES

- A. The USEPA hazardous waste identification number is provided on the "Acknowledgement of Notification of Hazardous Waste Activity" included as Attachment 02120-1 to this Section.
- B. The Contractor shall be responsible for the off-site transportation of all wastes specified or generated as a result of the Work. This includes materials generated by final Site cleanup activities including the dismantling of the temporary facilities and controls.
- C. The Contractor shall be responsible for coordinating the number and schedule of vehicles required for off-site transportation of waste materials generated during the execution of the specified work.
- D. The Contractor shall be responsible to inspect the transportation vehicles before and after loading to ensure compliance with all local, State, and Federal regulations for the safe transport of wastes from the Site to the receiving facility. The Contractor shall provide the necessary labor and materials to insure all trucks, containers, etc. are lined with plastic prior to filling, as required; foamed or stabilized with an agent, if necessary; and covered prior to departure.
- E. The Contractor shall insure that the transporters arriving at the Site for loading do not cause undue congestion to local roads, and shall stage trucks either within the perimeter of the Site or at an off-site staging area approved by the Engineer. Transporters shall not be accepted at the site before 7:00 AM and after 5:00 PM.
- F. The Contractor's transporters shall proceed directly from the Site to the designated receiving facility indentified by the Contractor in the Construction Work Plan. Temporary staging or storage of material at intermediate locations between the Site and the receiving facility is prohibited.
- G. The Contractor shall originate, maintain, and provide the Engineer with a copy of each executed Bill of Lading for all loads shipped off-site. In addition, the Contractor shall provide the Engineer documentation and records verifying receipt of each truck load by the receiving facility. Such documentation shall indicate the actual weight of each load shipped.
- H. Transporters shall proceed from the Site along traffic routes established by the Contractor and documented in the Construction Work Plan and videos. Transporters shall call back

- weights after each load and modify loads accordingly. The Contractor shall ensure that trucks leaving the Site are within appropriate weight limitations for the local roads along the designated route.
- I. Transporters operated by the Contractor shall comply with the New York State Diesel Emissions Reduction Act (DERA), Environmental Conservation Law 19-0323, and 6 NYCRR Part 248 when using heavy duty vehicles, as described in Section 01352 Environmental Protection Procedures.

1.07 DISPOSAL OF WASTES

- A. The Contractor shall be responsible for the proper disposal of all solid and liquid wastes that are specified as a component of the Work or that are generated during the execution of the Work in conformance with all Federal, State, and local regulations and requirements. Proper disposal requires that the facility accepting the waste be a state licensed disposal/recycling facility that is approved for acceptance of the waste based on the results of the characterization testing and analysis.
- B. The disposal facilities shall be approved by the Engineer/Department prior to the transporting of waste. The Contractor shall not change facilities without prior consent of the Engineer/Department.
- C. All waste loads designated for off-site transportation and disposal shall be weighed on site with the temporary portable scale. The load weights shall be reported to the Engineer. These non-certified weights shall serve as a quality control check of the certified weight slips reported by the disposal facility.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

END OF SECTION



ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

12/03/2010

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act (RCRA). Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER:

NYR000178905

INSTALLATION NAME:

CORTLANDVILLE TOWN OF SOUTH HILL DUMP

INSTALLATION ADDRESS:

SOUTH HILL RD

CORTLANDVILLE, NY 13073

MAILING ADDRESS:

3579 TERRACE RD

CORTLANDVILLE, NY 13045

EPA Form 87(X)-12AB (4-80)

USEPA - REGION 2 RCRA Programs Branch 290 Broadway, 22nd Floor New York, NY 10007-1866

ATTN: RCRA NOTIFICATIONS

Tel: (212) 637-4106 Fax: (212) 637-4437

TO: CORTLANDVILLE TOWN OF SOUTH HILL DUMP

or Current Occupant

ATTN: DAVID CHIUSANO

625 BROADWAY 12TH FLOOR NYSDEC DIV ENV REMEDIATION

ALBANY, NY, 12233-7017



SECTION 02140

DRUMS AND VISUALLY IMPACTED SOIL REMOVAL, HANDLING, AND STORAGE

PART 1 – GENERAL

1.01 DESCRIPTION

- A. The site of the Work is a Class 2 Inactive Hazardous Waste Site (Site No. 712009). Investigation work at the Site has identified both surficial and buried drums within the landfill. The drums may include materials of a hazardous nature including solids and/or liquids. Some surficial and buried drums have previously been emptied of their contents and have been crushed or processed to some degree prior to their deposition on the Site or incorporation into the waste mass.
- B. During performance of the Work, surficial and buried drums; surficial and buried drum remnants/carcasses; and/or visually contaminated soils in contact with drums/drum remnants will be encountered.
- C. The Contractor shall furnish all labor, materials, equipment, services, and incidentals required to properly remove, handle, manage and store any intact drums or visually contaminated soils which are determined to be potentially hazardous in nature.
- D. The Contractor shall furnish all labor, materials, equipment, services, and incidentals required to properly handle, manage, and dispose of on-site drums that are, at the time they are found on site or exhumed from the landfill, empty, crushed/processed, or drum remnants/carcasses,. Disposal shall occur off-site as Bulky Waste Metal.
- E. Depending on the condition of the intact drum, the Contractor shall either transfer liquid drum contents to a new closed drum or place in an overpack drum. Drums containing solids shall be placed into overpack drums.
- F. The Contractor shall sample the contents of the drums for hazardous waste analysis in accordance with applicable New York State Regulations. Refer to Section 02105 Chemical Sampling and Analysis. Hazardous determination will be completed in accordance with the approved sampling and analysis plan. Materials determined to be hazardous shall be properly disposed off-site at permitted facilities.
- G. The contents of drums or soils which are determined to be nonhazardous shall be disposed on-site by consolidating within the new solid waste boundary in accordance with the requirements of the Contract Documents.
- H. All aspects of the Work shall be conducted in accordance with the requirements of the Contractor prepared Health and Safety Plan (HASP).
- I. The Contractor shall develop, implement, maintain, supervise, and be responsible for a comprehensive Spill and Discharge Control Plan. This plan shall be submitted to the Engineer for approval prior to mobilization to the project site, and shall provide contingency measures for potential spills and discharges from all drum removal activities.
- J. The Contractor shall provide equipment and personnel to perform emergency measures required to contain any spills or discharges from exhumed drums, and to remove spilled material and soils or liquids that become contaminated due to spillage or discharge.
- K. The Contractor shall provide equipment and personnel to perform decontamination measures that may be required to remove residues on equipment or material used to

exhume, handle, and store exhumed drums. Decontamination residues shall be properly disposed of.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02105 Chemical Sampling and Analysis
- B. Section 02110 Waste Removal, Handling, and Storage
- C. Section 02120 Off-Site Transportation and Disposal
- D. Section 02245 Construction Water Management
- E. Section 02300 Earthwork

1.03 REFERENCES

- A. The publications listed below form a part of this Specification to the extent referenced. The publications are referred to in the text by the basic designation only.
 - Occupational Safety and Health Administration (OSHA)
 29 CFR 1910 Occupational Safety and Health Standards
 29 CFR 1926 Safety & Health Regulations for Construction
 - U.S. Department of Transportation (DOT)
 49 CFR Part 178 DOT Regulations for Shipping Containers Specifications
 - 3. New York Codes, Rules and Regulations (NYCRR)
 6 NYCRR Part 360 Solid Waste Management Regulations
 6 NYCRR Part 373 Hazardous Waste Management Regulations
 6NYCRR Part 371 Identification and listing of Hazardous Waste
 - 4. U.S. Environmental Protection Agency
 40 CFR 261 -Identification and Listing of Hazardous Wastes

1.04 SUBMITTALS

- A. Prior to mobilization to the project site, the Contractor shall develop and submit a Drum/Container Removal Plan for approval. As a minimum, this plan shall include the following provisions.
 - 1. Description of work teams and the function of members of work teams involved in drum/container excavation and removal.
 - 2. Air monitoring during drum/container removal.
 - 3. Equipment used during drum/container excavation and removal, with particular reference to how the equipment will limit damage to drums/containers and limit sparking.
 - 4. Spill and Discharge Control Plan to describe procedures to control and contain spilled liquids if a leaking drum is encountered.
 - 5. Procedures if an unusual or bulging drum/container is encountered.
 - 6. Procedures to remove drums/containers from excavations and place, if necessary, in overpack drums or transfer drums.

- 7. Equipment to transport drums/containers to the staging area.
- 8. Consolidating drums and visually impacted soils of similar waste material and placing in haulage units for transport to a permitted facility for disposal.
- B. Submit to the Engineer for approval the following manufacturer's data for products in accordance with Section 01330 Submittal Procedures:
 - 1. Repack drums (liquids): 30 gallon and 55 gallon DOT –approved Closed Head Drums
 - 2. Repack drums (solids): 55 gallon DOT-Approved Open Head Drums
 - 3. Overpack Drums/Containers: 85 gallon DOT-approved drums.
 - 4. Bulk Containers: 15 cubic yards DOT approved liquid tight roll-off container.
 - 5. List of proposed drum handling equipment.
 - 6. Other materials: Selected by Contractor for the purpose intended and subject to Engineer's approval prior to use.
 - 7. Record Drawing depicting the location of each surficial or buried intact drum encountered.

1.05 DEFINITIONS

- A. Drum/Container: Drum or container of any size made of metal, plastic, fiber, or other material which has in the past, is presently, or has been designed to contain a liquid, solid, or sludge.
- B. Intact Drum: A drum or container that appears to contain solids or liquids encountered during the course of site work including waste excavation and grading and has not been compromised by corrosion or previous damage by crushing or puncture.
- C. Drum Carcass: A drum or container with compromised integrity due to previous perforation, crushing, or corrosion damage and is empty of liquids, solids, or sludges. Drum carcasses shall be managed as a solid waste and may be consolidated within the new landfill boundary without the need for any additional handling or staging.
- D. Visually Impacted Soils: Soil material immediately contiguous to a surficial or buried drum that has been visually impacted by spilled drum contents.
- E. Chemical Liquid Wastes: Chemicals in liquid form found inside or in proximity to damaged/leaking buried drums uncovered during landfill waste consolidation and grading.
- F. Contaminated material: Contaminated material shall be defined as material which may contain USEPA Hazardous Substance List (HSL) compounds.
- G. Waste consolidation: Excavation and removal of solid waste outside the limit of the new solid waste boundary and placement within the new boundary. Placement includes filling, grading, and compacting.

2.01 MATERIALS

- A. The Contractor shall provide for containerization of intact drums, containerization of bulk soils contaminated by the contents of leaking drums, and control of any spills or discharges through provision of the following minimum equipment and materials to be kept on-site at all times during site work activities.
 - 1. Clean fill or other noncombustible absorbent.
 - 2. Appropriate drum excavation and handling equipment.
 - 3. Closed Head Drums: Closed head drums shall be utilized for the purpose of containing hazardous liquids under this contract. Closed head drums (30 gallon and 55-gallon capacity) and shall be provided with one 2-inch diameter bung opening for filling purposes and one 3/4-inch diameter bung opening for venting purposes. Closed head drums shall meet or exceed the requirements of 40 CFR Part 178.116, Specification 17E.
 - 4. Open Head Drums: Open head drums shall be utilized for the purpose of containing contaminated materials in solid form such as soils, dense sludges and miscellaneous other solid materials contaminated during the Work. Open head drums shall be provided with a removable top, bolt ring, bolt, nut, and sponge rubber gasket. Open head drums shall have a capacity of 55 gallons and shall meet or exceed the requirements of 49 CFR Part 178.118, Specification 17H.
 - 5. Overpack Drum/Container: Overpack containers shall be utilized for the purpose of containing drums filled or partially filled with hazardous materials. Overpack containers shall have an 85 gallon capacity, be DOT-approved, and of a material of construction compatible with the waste materials. Overpack drums may be reused if cleaned to remove gross contamination.
 - 6. Roll-off Containers: Roll-off containers shall be utilized for the purpose of containing visually impacted soils contiguous to a drum encountered during the course of waste excavation or consolidation. Roll-off containers shall be 15 cubic yards in capacity and shall have appropriate seals to contain free liquids or lined with 10 mil (minimum) polyethylene liner.
 - 7. Shovels.

PART 3 - EXECUTION

3.01 DRUM REMOVAL

- A. Surficial drums will be encountered at the site. All work shall be performed in the presence of both the Engineer and the Contractor's Health and Safety Officer and in accordance with Section 02300 Earthwork.
- B. Buried drums will likely be encountered during the excavation and consolidation of wastes at the site. All work shall be performed in the presence of both the Engineer and

- the Contractor's Health and Safety Officer and in accordance with Section 022300 Earthwork of the Specifications.
- C. Where intact drums are encountered as part of the Work, the Contractor shall take all necessary steps to remove the drums without further damage and transfer drums to the staging area.
- D. If an intact drum cannot be removed from its location without rupture, the Contractor shall inspect and inventory the drum in accordance with Section 3.04 Initial Staging, where possible and safety considerations allow, and shall transfer the drum contents to a sound container using a pump designed for transferring that liquid or shall place the drum in an overpack container using a drum grappler. If safety considerations preclude in-place inspection and inventory of an encountered buried drum, the drum shall be exhumed from the waste excavation and staged at the side of the excavation for inspection, inventory, and transfer of contents, if required.
- E. The condition of drums encountered may vary significantly in appearance and integrity. Surficial and buried drum carcasses encountered on site or exposed during waste consolidation or grading activities shall be incorporated into the solid waste landfill within the new solid waste boundary. The Engineer shall make the determination on drum condition and classification.
- F. Drums with compromised integrity due to visible damage associated with perforations, punctures, or corrosion, but containing solid materials shall be exhumed and staged for further characterization and handling.
- G. Documentation samples will be completed in accordance with the requirements specified in Section 02105 Chemical Sampling and Analysis.
- H. The contents of secured drums shall be sampled and characterized in accordance with the waste characterization requirements of Section 02105 Chemical Sampling and Analysis and/or the requirements of the intended receiving disposal facility.
- I. Upon receipt of hazardous waste characterization data for the secured drums, drums containing waste that does not meet hazardous waste criteria shall be interred within the new solid waste boundary. Drums containing waste that meets hazardous waste criteria shall be transported off-site for disposal at a permitted hazardous waste facility.
- J. Partially filled secured drums containing characteristic or listed hazardous waste shall be consolidated with other partially filled drums containing compatible wastes prior to disposal. The emptied drum shall have its contents emptied to meet RCRA rules for empty drum classification and management, and shall be interred within the new solid waste boundary.

3.02 OBSERVATION LOGS

- A. Concurrent with the identification of intact or compromised and partially filled drums during waste consolidation, the Contractor shall develop and maintain a log of observations for the purpose of establishing a record of the general character of the materials encountered. The log shall be maintained in a manner acceptable to the Engineer and shall include the following information at a minimum.
 - 1. Date.
 - 2. Location.
 - 3. Depth of excavation.
 - 4. Groundwater elevation (if encountered).

- 5. Nature of the material encountered (i.e., sand, silt, waste).
- 6. Identify any unusual features (i.e., trash, metallic objects, oily liquids, stained soils).

3.03 DEWATERING

- A. The Contractor shall construct temporary berms, swales and other facilities required to prevent surface water and liquids from entering or leaving the area of excavation during buried drum exhumation.
- B. The Contractor shall provide and maintain proper and satisfactory means and devices for the removal of water, which may enter the excavation.
- C. The Contractor shall handle all groundwater, stormwater, and leachate encountered during excavation in accordance with the requirements of Section 02245 Construction Water Management.

3.04 INITIAL STAGING

- A. Inspection Prior to handling any drum, the Contractor shall visually inspect each to ascertain the following information.
 - 1. Symbols and other markings which may indicate the nature of the drum contents and/or the drum's origin.
 - 2. Drum condition (i.e., corrosion, leakage, bulging/under pressure).
 - 3. Drum type.
 - 4. Configuration of the drum head.
 - 5. Conditions in the immediate vicinity of the drum (i.e., evidence of leakage).
- B. Inventory Subsequent to the visual inspection, each intact drum shall be subject to the following inventory procedure.
 - 1. Location The location of each container shall be plotted on the Record Drawings maintained by the Contractor in accordance with Section 01720 Field Engineering and Surveying.
 - 2. Information Sheet The Contractor shall record drum information, such as container type, size; condition; type of materials; and any identifying characteristics, labels, or identification markings on the container. The format of the information sheet shall be as approved by the Engineer.
 - 3. Code Each inventoried item will be tagged with a numeric code corresponding to the information sheet prepared for that item.
 - 4. Photographs The Contractor shall take color photographs of each drum and identifying information.
 - 5. Staging Area The Contractor shall establish an on-site staging area. The staging area shall be segregated into separate operating areas to accommodate a drum storage section and a contaminated soil storage section. Storage of contaminated material outside the approved staging areas is prohibited.
 - 6. Visually Impacted Soil As visually impacted soil is removed from the excavation at the direction of the Engineer, the Contractor shall transport it directly to a roll-off container or the soil storage section of the staging area. No

visually impacted soil will be permitted to be stockpiled adjacent to the area of excavation unless approved by the Engineer. Within the confines of the staging area, the visually impacted soil shall be immediately placed in watertight roll-off container, covered with 10-mil polyethylene sheeting, and secured to the satisfaction of the Engineer.

C. Handling and Transport Equipment

- 1. All handling, moving, and transport of drums shall only be by use of mechanical equipment. No drums shall be handled manually. All equipment shall be site dedicated until the completion of the Work unless approval is received from the Engineer for removal from the project site.
- 2. Remote drum handling equipment shall at a minimum consist of a grappler equipped backhoe/excavator, or front end loader. Drum transportation shall be with front end loaders or forklifts fitted with modified carrying platforms.
- 3. Alternate methods of segregating, lifting, or loading drums may be used subject to prior approval from the Engineer.
- 4. Portions of equipment that contact drums shall be constructed of nonferrous metals or contact portions shall be coated or lined to prevent spark generation.
- 5. All handling and transport equipment shall be equipped with full frontal and side splash and explosion shields. Class ABC fire extinguishers shall be fitted to the body of each piece of equipment.
- 6. All equipment shall be well maintained and in first class condition. The ignition, manifold and exhaust components shall be maintained to prevent backfiring or generation of sparks within the exhaust gasses.
- 7. Removal of drum bungs or ring tops shall be performed with non sparking tools.

D. Drum Handling

- 1. Personnel involved in handling and transporting of drummed waste shall work in teams containing no fewer than two people. Visual contact shall be maintained between members of the working team at all times. All team members shall be able to communicate with each other and with the Safety Officer or the Health and Safety Technician by two-way radio during on the project site at all
- 2. Intact drums shall be placed in overpack containers at the direction of the Engineer.
- 3. Intact drums removed from the excavation shall be transported directly to the drum storage section of the staging area unless directed otherwise by the Engineer. No drums will be permitted to be stockpiled adjacent to the area of excavation unless approved by the Engineer. If drums are stockpiled adjacent to the area of excavation, they will be placed on 10-mil polyethylene sheeting and covered by 10-mil polyethylene sheeting and secured.

3.05 ON-SITE STORAGE

A. The Contractor shall maintain the on-site staging area for the duration of the excavation and consolidation of waste in accordance with the requirements of New York State and

- shall protect and maintain the drums and/or soil storage from the elements, surface runoff, damage, or any related conditions in order to prevent spills or discharges.
- B. Roll-off Units: Roll-off units or equivalent, used to temporarily store contaminated material shall be watertight. A cover shall be placed over the units to prevent precipitation from contacting the stored material. Liquid which collects inside the units shall be removed, collected, sampled and disposed of in accordance with all applicable federal, state and local laws and regulations.
- C. Storage and handling of contaminated soil and drums must comply with all applicable New York State Department of Environmental Conservation hazardous waste regulations (6 NYCRR Part 371-376).

3.06 ON-SITE DISPOAL

- A. Visually impacted soil that is classified as non-hazardous solid waste as a result of waste characterization sampling and analysis may be disposed of on-site within the new solid waste boundary if fill space is available.
- B. Solid materials in drums may be removed from the drums and disposed on-site within the new solid waste boundary if the waste characterization sampling and analysis classifies the material as non-hazardous.
- C. If on site disposal volume is unavailable for non-hazardous solid wastes, the material shall be disposed off-site in accordance with Section 02120 Off-Site Transportation and Disposal.

3.07 OFF-SITE TRANSPORTION AND DISPOSAL

- A. Refer to Section 02120 Off-Site Transportation and Disposal
- B. The Contractor shall be responsible for ensuring that all stockpiled/drummed waste meets the approved facility's acceptance criteria, including but not limited to, the absence of free liquids prior to off-site transportation and disposal.
- C. The Contractor shall be responsible for all costs involved in the handling of any wastes deemed unacceptable by the approved disposal facility.
- D. Spill Prevention and Response: The Contractor shall conduct handling and transport of drummed or containerized waste in a controlled and safe manner which will minimize damage to containers, containerized materials, and the environment.
- E. Visually impacted soils classified as hazardous waste as a result of waste characterization sampling and analysis shall be containerized in drums and transported and disposed offsite.

F.	Drums containing liquid chemical wastes or spilled liquid wastes in proximity to damaged/leaking drums regardless of waste characterization shall be containerized and transported and disposed off-site. Waste characterization results will be used to identify the appropriate disposal facility.
	END OF SECTION
	021/10-0

SECTION 02231

CLEARING AND GRUBBING

PART 1 – GENERAL

1.01 DESCRIPTION

A. Work Included:

- 1. Clearing includes cutting at the ground surface trees and general woody growth including shrubs, bushes, vines, and general brush.
- 2. Grubbing includes removal of vegetative cover (grass) with root systems, stumps with root systems, and other organic matter surficial or buried within the top 1 foot of soil (topsoil).

B. Limit of Work:

- 1. Perform clearing within the limit of clearing as shown on the Construction Contract Drawings.
- 2. Prior to beginning remediation construction, perform grubbing within the limit of grading and additional areas as required to install the construction temporary facilities and controls.
- C. Clearing performed outside the defined limit of clearing shall not be permitted without permission of the Engineer

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02300 Earthwork
- B. Section 02370 Erosion and Sedimentation Control

1.03 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies:
 - 1. Dispose of combustible material by burning only when permitted by and in accordance with all applicable local and state laws, ordinances, and code requirements.
- B. Remove and dispose of non-salvageable structures and material in accordance with all applicable local and state laws, ordinances, and code requirements.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Wrapping materials:
 - 1. Burlap, in accordance with AASHTO M182.
 - 2. Polyethylene film, in accordance with ASTM D 2103.
 - 3. Paper.
- B. Herbicides: Used only for treating poison ivy.

PART 3 - EXECUTION

3.01 PROTECTION

- A. Streets, Roads, Adjacent Property, Existing Facilities, and Other Works to Remain:
 - 1. Protect throughout the work and exercise care to avoid unnecessary damage.
 - 2. Clearing and grubbing operations shall be conducted such that existing facilities or structures indicated to remain are not damaged. Existing features or structures that are indicated or made known prior to the start of clearing and grubbing operations shall be repaired in the event of any damage during such operations.
 - 3. Keep streets and roads accessible to emergency vehicles, patrols, and construction vehicles at all times.

B. Utility Lines:

- 1. Protect existing utility lines that are indicated to remain from damage.
- 2. When utility lines to be removed or relocated are encountered within the area of clearing and grubbing operations, the Contractor shall notify the associated utility company in ample time to minimize interruption of the service.
- 3. The Contractor shall notify the Engineer immediately of damage to or an encounter with an unknown existing utility line.
- 4. The Contractor shall be responsible for the repairs of damage to existing utility lines that are indicated or made known to the Contractor prior to start of clearing and grubbing operations.

3.02 PERFORMANCE

A. Layout and Marking:

- 1. The Contractor shall procure the services of a New York State licensed surveyor to field locate and mark the property boundaries.
- 2. Flag the clearing limit as delineated on the Construction Contract Drawing.

B. Clearing:

- 1. Remove trees, shrubs, and brush above the ground surface within the Limit of Clearing.
- 2. Segregate clearing debris, as required if on-site chipping is proposed.
- 3. Cleared material may be stockpiled within the limit of work but outside the existing/new solid waste boundary until off-site disposal is arranged.

C. Grubbing:

- 1. Remove all stumps, roots over 2 inches in diameter, matted roots, and vegetative matter including grasses and weeds within the limit of grading.
- 2. Segregate grubbings (e.g. stumps) greater than 6 inches in diameter from other grubbed materials.
- 2. Grubbings shall be stockpiled, if required, prior to disposal within the new solid waste boundary and shall be covered if necessary to prevent wind-blown dust.

D. Disposal:

- 1. Cleared vegetation shall be considered non-impacted waste and shall be removed from the Site and legally disposed. Alternately, smaller cleared material may be chipped and disposed on-site in a location approved by the Engineer.
- 2. Grubbed materials, including roots and stumps, less than 6 inches in diameter shall be considered impacted and shall be disposed on-site within the new solid waste boundary at the location delineated on Construction Contract Drawing C-102.
- 3. Grubbed materials, including roots and stumps, greater than 6 inches in diameter are considered impacted wastes unsuitable for on-site disposal and shall be disposed off-site as solid waste.
- 4. Burning of Materials: Burning is not permitted.
- 5. Removal: Should the Contractor be allowed to continue work beyond normal working hours, do not allow material to accumulate for more than 48 hours.

3.03 RESTORATION

A. Restore any items damaged by this work to their original condition.

END OF SECTION

SECTION 02245

CONSTRUCTION WATER MANAGEMENT

PART 1 – GENERAL

1.01 DESCRIPTION

A. As necessary furnish, operate, and maintain construction water management measures and equipment for the control, collection, treatment, and/or disposal of all construction related water including stormwater contacting waste (leachate), groundwater from dewatering operations, groundwater monitoring well development water, decontamination water, and other incidental water that contacts contaminated material or equipment.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01330 Submittal Procedures
- B. Section 01352 Environmental Protection Procedures
- C. Section 01410 Regulatory Requirements
- D. Section 02105 Chemical Sampling and Analysis
- E. Section 02110 Waste Removal, Handling, and Storage
- F. Section 02120 Off-Site Transportation and Disposal
- G. Section 02300 Earthwork
- H. Section 02370 Erosion and Sedimentation Control

1.03 SUBMITTALS

A. Prior to work at the Site, Contractor must supply a Construction Water Management Plan (CWMP) for the site. The CWMP must discuss the measures to minimize construction water generation, the manner for collection and handling of construction generated water, the treatment of construction water, and the disposal of construction water.

PART 2 - PRODUCTS

2.01 GENERAL

A. Provide, operate, and maintain a construction water management system. The system must be sized appropriately to store and/or treat the quantity of water so that water management does not impact construction work.

PART 3 – EXECUTION

3.01 PERFORMANCE

- A. Minimize generation of construction related water using engineering controls and best management practices, maintaining storm water controls, dewatering operations, and other related work.
- B. If the Engineer believes that construction water is being mishandled or there is insufficient management of the construction water, the Engineer may stop work until the Contractor corrects the problem.
- C. Disposal of construction water shall be to a properly permitted facility allowed to accept the water based on the characterization testing performed by the Contractor in accordance with Section 02105 Chemical Sampling and Analysis and in coordination with the designated approved disposal facility requirements.
- D. On-site discharge of construction water to surface water and/or groundwater locations approved by the Engineer may be allowed provided one of the following conditions can be met:
 - 1. The short term discharge criteria and monitoring requirements (see Attachments 02245-1 and 02245-2) for each discharge point can be met given the characteristics of the construction water; or
 - 2. On-site facilities can be provided to treat the construction water so that it can meet the short term discharge criteria and monitoring requirements for each discharge point.

END OF SECTION

Attachment 02245-1

Discharge to Groundwater

Part 1, Page 1 of 10

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from the start of the discharge.

the discharges from the treatment facility to groundwater shall be limited and monitored by the operator as specified below:

				Minim	um
		Discharge		Monitoring Re	quirements
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Type
Outfall 001 - Containerized Well Developm	ent Water and /		ater:		
Oditati 001 - Odittatilerized Weit Developiti	chi vvater and/	Of Fulfip Test 11	<u>ater.</u>		
Flow	NA ·	Monitor	gpd	Continuous	Meter
pH(Range)	NA	6.5 to 8.5	SU	(1)	Grab
Oil and Grease	NA	15	mg/l	(1)	Grab
Solids, Total Dissolved	NA	1,000	mg/l	(1)	Grab
Nitrogen, Total (as N)	NA	10	mg/l	(1)	Grab
Foaming Agents (as MBAS)	NA	1.0	mg/l	(1)	Grab
Acenaphthene	83-32-9	20	μg/l	(1)	Grab
Acetone	67-64-1	100.0 ²	μg/l	(1)	Grab
Acrylic acid	79-10-7	50	μg/l	(1)	Grab
Acrylonitrile	107-13-1	5	μg/l	(1)	Grab
Alachlor	15972-60-8	35	μg/l	(1)	Grab
Aldicarb	116-06-3	8.0 ²	μg/l	(1)	Grab
Methomyl	16752-77-5	40.0 ²	μg/l	(1)	Grab
Aldicarb sulfone	1646-88-4	2	μg/l	(1)	Grab
Aldicarb sulfoxide	1646-87-3	4	μg/l	(1)	Grab
Aldrin	309-00-2	0.020 ²	μg/l	(1)	Grab
Alkyl dimethyl benzyl ammonium chloride	68391-01-5	50	μg/l	(1)	Grab
Alkyl diphenyl oxide sulfonates ³	NA	50	μg/l	(1)	Grab
Aluminum, Total	NA	2000	μg/l	(1)	Grab
Ametryn	834-12-8	50	μg/l	(1)	Grab
Aminomethylene phosphonic acid salts ⁴	NA	50	μg/l	(1)	Grab
Sum of Aminopyridines	NA	1.0	μg/l	(1)	Grab
Ammonia (as N)	7664-41-7	2000	μg/l	(1)	Grab
Aniline	62-53-3	10	μg/l	(1)	Grab
Anthracene	120-12-7	50	μg/l	(1)	Grab
Antimony, Total	NA	10	μg/l	(1)	Grab
Arsenic, Total	NA	50	μg/l	(1)	Grab
Aryltriazoles ³	NA	50	μg/l	(1)	Grab
Atrazine	1912-24-9	8	μg/l	(1)	Grab
Azinphosmethyl	86-50-0	4.4	μg/l	(1)	Grab
Azobenzene	103-33-3	5	μg/l	(1)	Grab
Barium, Total	NA	2,000	μg/l	(1)	Grab
Benefin(Benfluralin)	1861-40-1	35	μg/l	(1)	Grab
Benz(a)anthracene	56-55-3	0.050 ²	μg/l	(1)	Grab
Benzene	71-43-2	0.80 ²	μg/l	(1)	Grab

Part 1, Page 2 of 10

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from the start of the discharge.

the discharges from the treatment facility to groundwater shall be limited and monitored by the operator as specified below:

	·	Discharge		Minimu Monitoring Red	
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Type
Benzidine	92-87-5	5	<u>μg/</u> l	(1)	Grab
Benzisothiazole	271-61-4	50	μg/l	(1)	Grab
Benzo(b)fluoranthene	205-99-2	0.070 ²	μg/l	(1)	Grab
Benzo(k)fluoranthene	207-08-9	0.020 ²	μg/l	(1)	Grab
Benzo(a)pyrene	50-32-8	0.090 ²	μg/l	(1)	Grab
Beryllium, Total	NA	3	μg/l	(1)	Grab
Bis(2-chloroethyl)ether	111-44-4	1.0	μg/l	(1)	Grab
Bis(2-ethylhexyl)phthalate	117-81-7	4,200	μg/l	(1)	Grab
Boric acid, Borates & Metaborates ⁵	NA	125	μg/l	(1)	Grab
Boron, Total	NA	2,000	μg/l	(1)	Grab
Bromacil	314-40-9	10.0 ²	μg/l	(1)	· Grab
Bromide, Total	NA	2,000	μg/l	(1)	Grab
Bromobenzene	108-86-1	5	μg/l	(1)	Grab
Bromochloromethane	74-97-5	5	μg/l	(1)	Grab
Bromodichloromethane	75-27-4	50	μg/l	(1)	Grab
Bromoform	75-25-2	50	μg/l	(1)	Grab
Bromomethane	74-83-9	5	μg/l	(1)	Grab
Butachlor	23184-66-9	3.5	μg/l	(1)	Grab
Butoxyethoxyethanol	112-34-5	50	μg/l	(1)	Grab
Butoxypropanol	5131-66-8	50	μg/l	(1)	Grab
Butylate	2008-41-5	50	μg/l	(1)	Grab
n-Butylbenzene	104-51-8	5	μg/l	(1)	Grab
sec-Butylbenzene	135-98-8	5	μg/l	(1)	Grab
tert-Butylbenzene	98-06-6	5	μg/l	(1)	Grab
Butyl benzyl phthalate	85 - 68-7	50	μg/l	(1)	Grab
Butyl isopropyl phthalate	NA	50	μg/l	(1)	Grab
Cadmium, Total	NA	20	µg/l	(1)	Grab
Captan	133-06-2	1 8	µg/l	(1)	Grab
Carbaryl	63-25-2	29	μg/l	(1)	Grab
Carbofuran	1563-66-2	15	µg/l	(1)	Grab
Carbon tetrachloride	56-23-5	5	μg/l	(1)	Grab
Carboxin	5234-68-4	50	µg/l	(1)	Grab
Chloramben ⁶	NA	88	μg/l	(1)	Grab
Chlordane	57-74-9	0.1	μg/l	(1)	Grab
Chloride	NA	500,000	μg/l	(1)	Grab
2,3,7,8-Tetrachlorodibenzo-p-dioxin	NA	0.0080 ²	µg/l	. (1)	Grab

Part 1, Page 3 of 10

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 davs from the start of the discharge.

the discharges from the treatment facility to groundwater shall be limited and monitored by the operator as specified below:

		Discharge		Minima Monitoring Rea	
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Туре
Chlorinated dibenzo-p-dioxins and					
Chlorinated dibenzofurans	NA	0.0080 ²	μg/l	(1)	Grab
Chlorobenzene	108-90-7	5	μg/l	(1)	Grab
4-Chlorobenzotrifluoride	98-56-6	5	μg/l	(1)	Grab
Chloroethane	75-00-3	5	μg/l	(1)	Grab
Chloroform	67-66-3	7	μg/l	(1)	Grab
2-Chloronaphthalene	91-58-7	10	μg/l	(1)	Grab
2-Chlorotoluene	95-49-8	5	μg/l	(1)	Grab
4-Chlorotoluene	106-43-4	5	μg/l	(1)	Grab
5-Chloro-o-toluidine	95-79-4	5	μg/l	(1)	Grab
Chromium, Total	NA	100	μg/l	(1)	Grab
Chromium, Hexavalent	NA	100	μg/l	(1)	Grab
Chrysene	218-01-0	0.60 ²	μg/l	(1)	Grab
Copper, Total	NA	1,000	. υ, μg/l	(1)	Grab
Cyanide, Total	NA	400	. σ, μg/l	(1)	Grab
Dalapon ⁵	NA	50	, σ, μg/l	(1)	Grab
4,4'-DDT	50-29-3	0.050 ²	, σ, μg/l	(1)	Grab
4,4'-DDD	72-54-8	0.040 ²	, σ, μg/l	(1)	Grab
4,4'-DDE	72-55-9	0.020 ²	μg/l	(1)	Grab
Dechlorane Plus	13560-89-9	5	μg/l	(1)	Grab
Diazinon	333-41-5	0.7	μg/l	(1)	Grab
Dibromochloromethane	124-48-1	50	μg/I	(1)	Grab
1,2-Dibromo-3-chloropropane	96-12-8	5	μg/l	(1)	Grab
Dibromodichloromethane	594-18-3	5	μg/l	(1)	Grab
Dibromomethane	74-95-3	5	, g, μg/l	(1)	Grab
2,2-Dibromo-3-nitrilopropionamide	10222-01-2	50	μg/l	(1)	Grab
Di-n-butyl phthalate	84-74-2	770	. σ, μg/l	(1)	Grab
Dicamba	1918-00-9	0.44	. с, Ири	(1)	Grab
1,2-Dichlorobenzene	95-50-1			chlorobenzenes	
1,4-Dichlorobenzene	106-46-7			chlorobenzenes	
Sum of 1,2- & 1,4-Dichlorobenzenes	NA	4.7	μg/l	(1)	Grab
1,3-Dichlorobenzene	541-73-1	5	μg/l	(1)	Grab
3,4-Dichlorobenzotrifluoride	328-84-7	5	μg/l	(1)	Grab
Dichlorodifluoromethane	75-71-8	5	μg/l	(1)	Grab
1,1-Dichloroethane	75-34-3	5	μg/l	(1)	Grab
1,2-Dichloroethane	107-06-2	5	μg/l	(1)	Grab
cis-1,2-Dichloroethylene	156-59-2	5	μg/l	(1)	Grab

Part 1, Page 4 of 10

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from the start of the discharge.

the discharges from the treatment facility to groundwater shall be limited and monitored by the operator as specified below:

		Discharge		Minima Monitoring Rea	
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Туре
trans-1,2-Dichloroethylene	156-60-5	5	<u> </u>	(1)	Grab
1,1-Dichloroethylene	75-35-4	5	μg/l	(1)	Grab
Dichlorofluoromethane	75-43-4	5	μg/l	(1)	Grab
2,4-Dichlorophenoxyacetic acid	94-75-7	4.4	μg/l	(1)	Grab
1,2-Dichloropropane	78-87-5	5	μg/l	(1)	Grab
1,1-Dichloropropane	78-99-9	5	μg/l	. (1)	Grab
1,3-Dichloropropane	142-28-9	5	μg/l	(1)	Grab
2,2-Dichloropropane	594-20-7	5	μg/l	(1)	Grab
1,1-Dichloropropene	563-58-6	5	μg/l	(1)	Grab
cis-1,3-Dichloropropene	10061-01-5	5	μg/l	(1)	Grab
trans-1,3-Dichloropropene	10061-02-6	5	μg/l	(1)	Grab
2,3-Dichlorotoluene	32768-54-0	5	μg/l	(1)	Grab
2,4-Dichlorotoluene	95-73-8	5	μg/l	(1)	Grab
2,5-Dichlorotoluene	19398-61-9	5	μg/l	(1)	Grab
2,6-Dichlorotoluene	118-69-4	5	μg/l	(1)	Grab
3,4-Dichlorotoluene	95-75-0	5	μg/l	(1)	Grab
3,5-Dichlorotoluene	25186-47-4	5	μg/l	(1)	Grab
Dieldrin	60-57-1	0.0080 ²	μg/l	(1)	Grab
Di(2-ethylhexyl)adipate	103-23-1	50	μg/l	(1)	Grab
Diethyl phthalate	84-66-2	50	μg/l	(1)	Grab
N,N-Dimethyl aniline	121-69-7	5	μg/l	(1)	Grab
Dimethylformamide	68-12-2	50	μg/l	(1)	Grab
Dimethyl phthalate	131-11-3	50	μg/l	(1)	Grab
Dimethyl tetrachloroterephthalate	1861-32-1	50	μg/l	(1)	Grab
2,6-Dinitrotoluene	606-20-2	5	μg/l	(1)	Grab
Di-n-octyl phthalate	117-84-0	50	μg/l	(1)	Grab
Diphenamid	957-51-7	50	μg/l	(1)	Grab
1,2-Diphenylhydrazine	122-66-7	ND	μg/l	(1)	Grab
1,1-Diphenylhydrazine	530-50-7	ND	μg/l	(1)	Grab
Diquat dibromide	85-00-7	20	μg/l	(1)	Grab
Dodecylguanidine acetate	2439-10-3	see sum of D	odecylguanio	dine acetate and	
Dodecylguanidine hydrochloride	13590-97-1	Dodecyl	guanidine hy	drochloride	
Sum of Dodecylguanidine acetate and			-		
dodecylguanidine hydrochloride	NA	50	μg/l	(1)	Grab
Dyphylline	479-18-5	50	μg/l	(1)	Grab
Endothall	145-73-3	50	μg/l	(1)	Grab
Endrin	72-20-8	0.020 ²	μg/l	(1)	Grab

Part 1, Page _ 5 _ of _ 10

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from the start of the discharge.

the discharges from the treatment facility to groundwater shall be limited and monitored by the operator as specified below:

	•	Discharge		Minima Monitoring Red	-
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Туре
Ethylbenzene	100-41-4	5	<u>μg/</u> l		Grab
Ethylene chlorohydrin	107-07-3	50	μg/l	(1)	Grab
Ethylene dibromide	106-93-4	5	μg/l	(1)	Grab
Ethylene glycol	107-21-1	50	μg/l	(1)	Grab
Ethylene oxide	75-21-8	0.05	μg/l	(1)	Grab
Ethylenethiourea	96-45-7	ND	μg/l	(1)	Grab
Ferbam	14484-64-1	4.2	μg/l	(1)	Grab
Fluometuron	2164-17-2	50	μg/l	(1)	Grab
Fluoranthene	206-44-0	50	μg/l	(1)	Grab
Fluorene	86-73-7	50	μg/l	(1)	Grab
Fluoride	NA	3,000	μg/l	(1)	Grab
Folpet	133-07-3	56	μg/l	(1)	Grab
Glyphosate	1071-83-6	50	μg/l	(1)	Grab
Guaifenesin	93-14-1	50	μg/l	(1)	Grab
Heptachlor	76-44-8	0.010 ²	μg/l	(1)	Grab
Heptachlor epoxide	1024-74-3	0.30 ²	μg/l	(1)	Grab
Hexachlorobenzene	118-74-1	0.35	μg/l	(1)	Grab
Hexachlorobutadiene	87-68-3	5	μg/!	(1)	Grab
α-Hexachlorocyclohexane(α-BHC)	319-84-6	0.010 ²	μg/l	(1)	Grab
β-Hexachlorocyclohexane(β-BHC)	319-85-7	0.020 ²	μg/l	(1)	Grab
δ-Hexachlorocyclohexane(δ-BHC)	319-86-8	0.040 ²	μg/l	(1)	Grab
Γ-Hexachlorocyclohexane(Lindane)	58-89-9	0.020 ²	μg/l	(1)	Grab
Hexachlorocyclopentadiene	77-47-4	5	μg/i	(1)	Grab
Hexachlorophene	70-30-4	7	μg/l	(1)	Grab
2-Hexanone	591-78-6	50	μg/l	(1)	Grab
Hexazinone	51235-04-2	50	μg/l	(1)	Grab
1-Hydroxyethylidene-					
1,1-diphosphonic acid	2809-21-4	50	μg/l	(1)	Grab
2-(2-Hydroxy-3,5-di-tert-					
pentylphenyl)benzotriazole	25973-55-1	50	μg/l	(1)	Grab
Indeno(1,2,3-cd)pyrene	193-39-5	0.20 ²	μg/l	(1)	Grab
Iron, Total ⁷	NA	600	μg/l	(1)	Grab
Isophorone	78-59-1	50	μg/l	(1)	Grab
Isopropylbenzene	98-82-8	5	μg/l	(1)	Grab
4-Isopropyltoluene	99-87-6	5	μg/l	(1)	Grab
Kepone	143-50-0	10.0 ²	μg/l	(1)	Grab
Lead, Total	NA	50	μg/l	(1)	Grab

Part 1, Page _6 of _10

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from the start of the discharge.

the discharges from the treatment facility to groundwater shall be limited and monitored by the operator as specified below:

		Discharge		Minimu Monitoring Red	
Outfall Number &		Discharge Limitations	•	Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Туре
Magnesium, Total	NA NA	35,000	<u>μg/</u> l	(1)	Grab
Malathion	121-75-5	7.0	μg/l	(1)	Grab
Mancozeb	8018-01-7	60.0 ²	μg/l	(1)	Grab
Maneb	12427-38-2	60.0 ²	μg/l	(1)	Grab
Manganese, Total ⁷	NA	600	μg/l	(1)	Grab
Mercaptobenzothiazole	149-30-4	50	μg/l	(1)	Grab
Mercury, Total	NA	4	μg/l	(1)	Grab
Methacrylic acid	79-41-4	50	μg/l	(1)	Grab
Methoxychlor	72-43-5	35	μg/l	(1)	Grab
(2-Methoxyethyl)benzene	4013-34-7	50	μg/l	(1)	Grab
(1-Methoxyethyl)benzene	3558-60-9	50	μg/l	(1)	Grab
Sum of Methybenz(a)anthracenes	NA	0.002	μg/l	(1)	Grab
Methyl chloride	74-87-3	5	μg/l	(1)	Grab
2-Methyl-4-chlorophenoxyacetic acid(MC	PA) 94-74-6	1000 ²	μg/l	(1)	Grab
Methylene bisthiocyanate	6317-18-6	50	μg/l	(1)	Grab
Methylene chloride	75-09-2	5	μg/!	(1)	Grab
4-(1-Methylethoxy)-1-butanol	31600-69-8	50	μg/l	(1)	Grab
2-Methylethyl-1,3-dioxolane	126-39-6	50	μg/l	(1)	Grab
Methyl ethyl ketone	78-93-3	50	μg/l	(1)	Grab
Methyl methacrylate	80-62-6	700	μg/I	(1)	Grab
2-Methylstyrene	611-15-4	5	. σ, μg/l	(1)	Grab
3-Methylstyrene	100-80-1	5	μg/l	(1)	Grab
Metribuzin	21087-64-9	50	μg/l	(1)	Grab
Mirex	2385-85-5	5	μg/l	(1)	Grab
Nabam	142-59-6	60.0 ²	μg/l	(1)	Grab
Naphthalene	91-20-3	10	μg/l	(1)	Grab
Niacinamide	98-92-0	500	μg/l	(1)	Grab
Nickel, Total	NA	2,000	μg/l	(1)	Grab
Nitralin	4726-14-1	35	μg/l	(1)	Grab
Nitrate (as N)	NA	20,000	μg/l	(1)	Grab
Nitrilotriacetic acid ⁸	NA	3	μg/l	(1)	Grab
Nitrobenzene	98-95-3	5	μg/l	(1)	Grab
N-Nitrosodiphenylamine	86-30-6	50	μg/l	(1)	Grab
Oxamyl	23135-22-0	50	. υ. μg/l	(1)	Grab
Paraquat	4685-14-7	3.0	. σ, μg/l	(1)	Grab
Parathion	56-38-2			Methyl parathion	
Methyl parathion	298-00-0			Methyl parathion	

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Minimum

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from the start of the discharge.

the discharges from the treatment facility to groundwater shall be limited and monitored by the operator as specified below:

		Discharge		Monitoring Requirements		
Outfall Number &		Discharge Limitations		Measurement	Sample	
Effluent Parameter	CAS No.	Daily Max.	Units		Type	
	_			Frequency		
Sum of Parathion & Methyl parathion	NA	1.5	μg/l	(1)	Grab	
Pentachioronitrobenzene	82 - 68-8	0.40 ²	µg/l	(1)	Grab	
Phenanthrene	85-01-8	50	μg/l	(1)	Grab	
Phenolic compounds (total phenols) ¹⁵	NA	8.0 ²	. µg/l	(1)	Grab	
Phenyl ether	101-84-8	10	μg/l	(1)	Grab	
Phenylpropanolamine	14838-15-4	50	μg/l	(1)	Grab	
cis-1-Phenyl-1-propene	766-90-5	5	μg/l	(1)	Grab	
trans-1-Phenyl-1-propene	873-66-5	5	μg/l	(1)	Grab	
3-Phenyl-1-propene	637-50-3	5	μg/l	(1)	Grab	
Phorate	298-02-2	0.60 ²	µg/l	(1)	Grab	
Disulfoton .	298-04-4	0.60 ²	μg/l	(1)	Grab	
Picloram ⁵	NA	50	μg/l	(1)	Grab	
PCB-1016	12674-11-2	$0.30^{2.10}$	μg/l	(1)	Grab	
PCB-1221	11104-28-2	0.30 ^{2.10}	μg/l	(1)	Grab	
PCB-1232	11141-16-5	$0.30^{2.10}$	μg/l	(1)	Grab	
PCB-1242	53469-21-9	0.30 ² ,10	μg/l	(1).	Grab	
PCB-1248	12672-29-6	0.302/10	μg/l	(1)	Grab	
PCB-1254	11097-69-1	$0.30^{2,10}$	μg/l	(1)	Grab	
PCB-1260	11096-82-5	0.30 ² ,10	μg/l	(1)	Grab	
Principal organic contaminant(POC)9	NA	5	μg/l	(1)	Grab	
Prometon	1610-18-0	50	μg/l	(1)	Grab	
Propachlor	1918-16-7	35	μg/l	(1)	Grab	
Propanil	709-98-8	7.0	μg/l	(1)	Grab	
Propazine	139-40-2	16	μg/l	(1)	Grab	
Propham	122-42-9	50	μg/l	(1)	Grab	
n-Propylbenzene	103-65-1	5	μg/l	(1)	Grab	
Pyrene	129-00-0	50	μg/l	(1)	Grab	
Pyridine	1 10-86-1	50	μg/l	(1)	Grab	
Selenium, Total	NA	40	μg/l	(1)	Grab	
Silver, Total	NA	100	μg/l	(1)	Grab	
Simazine	122-34-9	75	μg/l	(1)	Grab	
Sodium	NA	20,000	μg/l	(1)	Grab	
Styrene	100-42-5	930	μg/l	(1)	Grab	
Sulfate	NA	500,000	μg/l	(1)	Grab	
Suflides, Total	NA	1,000	. υ, μg/l	(1)	Grab	
Tebuthiuron	34014-18-1	50	. σ, μg/l	(1)	Grab	
Terbacil	5902-51-2	50	. σ, μg/l	(1)	Grab	
				• •		

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from the start of the discharge.

the discharges from the treatment facility to groundwater shall be limited and monitored by the operator as specified below:

		Discharge		Minimo Monitoring Red	
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Type
Terbufos	13071-79-9	100.02	<u>μg/</u> l	(1)	Grab
Sum of Tetrachlorobenzenes	12408-10-5	10	μg/l	(1)	Grab
1,2,3,4-Tetrachlorobenzene	634-66-2	5	μg/l	(1)	Grab
1,2,3,5-Tetrachlorobenzene	634-90-2	5	μg/l	(1)	Grab
1,2,4,5-Tetrachlorobenzene	95-94-3	10.0 ²	μg/l	(1)	Grab
1,1,1,2-Tetrachioroethane	630-20-6	5	μg/l	(1)	Grab
1,1,2,2-Tetrachloroethane	79-34-5	5	μg/l	(1)	Grab
Tetrachloroethylene	127-18-4	5	μg/l	(1)	Grab
Tetrachloroterephthalic acid	2136-79-0	50	μg/l	(1)	Grab
Tetrahydrofuran	109-99-9	50	μg/l	(1)	Grab
Thallium, Total	NA	4	μg/l	(1)	· Grab
Theophylline	58-55-9	40	μg/l	(1)	Grab
Thiram	137-26-8	1.8	μg/l	(1)	Grab
Toluene	108-88-3	5	μg/l	(1)	Grab
o-Toluidine	95-53-4	5	μg/l	(1)	Grab
Tolytriazole	29385-43-1	50	μg/l	(1)	Grab
Toxaphene	8001-35-2	1.0 ²	μg/l	(1)	Grab
1,2,4-Tribromobenzene	615-54-3	5	μg/l	(1)	Grab
Tributyltin oxide	56-35-9	50	μg/l	(1)	Grab
Sum of Trichlorobenzenes	12002-48-1	10	μg/l	(1)	Grab
1,2,3-Trichlorobenzene	87-61-6	5	μg/l	(1)	Grab
1,2,4-Trichlorobenzene	120-82-1	5	μg/l	(1)	Grab
1,3,5-Trichlorobenzene	108-70-3	5	μg/l	(1)	Grab
1,1,1-Trichloroethane	71-55-6	5	μg/l	(1)	Grab
1,1,2-Trichloroethane	79-00-5	5	μg/l	(1)	Grab
Trichloroethylene	79-01-6	5	μg/l	(1)	Grab
Trichlorofluoromethane	75-69-4	5	μg/l	(1)	Grab
2,4,5-Trichloro-phenoxyacetic acid	93-76-5	35	μg/l	(1)	Grab
2,4,5-Trichloro-phenoxypropionic acid	93-72-1	0.26	μg/l	(1)	Grab
1,1,2-Trichloropropane	598-77-6	5	μg/l	(1)	Grab
1,2,3-Trichloropropane	96-18-4	5	μg/l	(1)	Grab
cis-1,2,3-Trichloropropene	13116-57-9	5	μg/l	(1)	Grab
trans-1,2,3-Trichloropropene	13116-58-0	5	μg/l	(1)	Grab
alpha,2,4-Trichlorotoluene	94-99-5	5	μg/l	(1)	Grab
alpha,2,6-Trichlorotoluene	2014-83-7	5	μg/l	(1)	Grab
alpha,3,4-Trichlorotoluene	102-47-6	. 5	μg/l	· (1)	Grab
alpha,alpha,2-Trichlorotoluene	88-66-4	5	μg/l	(1)	Grab

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from the start of the discharge.

the discharges from the treatment facility to groundwater shall be limited and monitored by the operator as specified below:

	D			Minimum Monitoring Requirements	
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Type
alpha,alpha,4-Trichlorotoluene	13940-94-8	5	<u>μg/</u> l	(1)	Grab
2,3,4-Trichlorotoluene	7359-72-0	5	μg/l	(1)	Grab
2,3,5-Trichlorotoluene	56961-86-5	5	μg/l	(1)	Grab
2,3,6-Trichlorotoluene	2077-46-5	5	μg/l	(1)	Grab
2,4,5-Trichlorotoluene	6639-30-1	5	μg/l	(1)	Grab
2,4,6-Trichlorotoluene	23749-65-7	5	μg/l	(1)	Grab
1,1,1-Trichloro-2,2,2-trifluoroethane	354-58-5	5	μg/l	(1)	Grab
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5	μg/l	(1)	Grab
Trifluralin	1582-09-8	35	μg/l	(1)	Grab
1,2,3-Trimethylbenzene	526-73-8	5	μg/l	(1)	Grab
1,2,4-Trimethylbenzene	95-63-6	5	μg/l	(1)	Grab
1,3,5-Trimethylbenzene	108-67-8	5	μg/l	(1)	Grab
2,3,6-Trimethylpyridine	1462-84-6	50	μg/l	(1)	Grab
2,4,6-Trimethylpyridine	108-75-8	50	μg/l	(1)	Grab
Triphenyl phosphate	115-86-6	50	μg/l	(1)	Grab
Uranyl ion	NA	10,000	μg/l	(1)	Grab
Vinyl chloride	75-01-4	2	μg/l	(1)	Grab
1,2-Xylene	95-47-6	5	μg/l	(1)	Grab
1,3-Xylene	108-38-2	5	μg/l	(1)	Grab
1,4-Xylene	106-42-3	5	μg/l	(1)	Grab
Zinc, Total	NA	5,000	μg/l	(1)	Grab
Zineb	12112-67-7	60.0 ²	μg/l	(1)	Grab
Ziram	137-30-4	8.0 ²	μg/l	(1)	Grab

Footnotes:

- (1) Samples must be collected prior to each discharge event. Discharge may not commence until the sample results show compliance with the above discharge limitations.
- (2) Discharge limit is set at the Practical Quantitation Limit (PQL). Actual groundwater effluent standard/limitation is below this limit.
- (3) Limit applies to each isomer individually.
- (4) Limit applies to each salt individually.
- (5) Limit applies as boron equivalents to the sum of these substances.

SEE PAGE 10 OF 10 FOR ADDITIONAL FOOTNOTES.

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Footnotes(continued):

- (6) Limit includes forms that convert to the organic acid upon acidification to a pH of 2 or less; and esters of the organic acid.
- (7) The combined concentration of iron, total and manganese, total shall not exceed 1000 µg/l.
- (8) Includes related forms that convert to nitrilotriacetic acid upon acidification to a pH of 2.3 or less.
- (9) Applies to any and every individual substance to which the ambient principal organic contaminant standard applies, except any substance that has an effluent standard or limitation value listed above. See DOW TOGS 1.1.1 for information on determining the applicability of the ambient POC standard to individual substances.
- (10) a. The treatment plant operator must monitor this discharge for PCBs using USEPA laboratory method 608. The laboratory must make all reasonable attempts to achieve an Minimum Detection Level (MDL) of 0.065 μg/l.
 - b. 0.10 μ g/l is the discharge goal. The treatment plant operator shall report all values above the MDL (0.065 μ g/l per Aroclor). If the level of any Aroclor is above 0.10 μ g/l, the treatment plant operator must evaluate the treatment system and identify the cause of the detectable level of PCBs in the discharge.
 - c. If the Department determines that effluent monitoring results above 0.10 µg/l can be prevented by implementation of additional measures as proposed by the treatment plant operator in footnote 10.b above, and approved by the Department, the treatment plant operator shall implement such additional measures.
- (11) Only site generated pump test and containerized well development water are authorized for treatment and discharge.
- (12) Samples and measurements, to comply with the monitoring requirements specified above, must be taken from the holding tank prior to discharge to groundwater.
- (13) Discharge may not occur unless the ground is capable of accepting the treated effluent. The discharged water may not be ponded on top of saturated or frozen ground or permitted to flow across the ground surface. Also, a minimum separation distance of 100 feet must be maintained between the discharge location and any surface waters (including wetlands).
- (14) Discharge is not authorized until such time as an engineering submission showing the method of treatment and discharge is approved by the Department. The discharge rate may not exceed the effective treatment system or ground adsorptive capacity. All monitoring data, engineering submissions and modification requests must be submitted to the following DER contact person: MACTEC Engineering and Consulting, P.C. ______.
- (15) Total phenolics must be analyzed using EPA Methods 420.1 or 420.2.

Attachment 02245-2

Discharge to Surface Water

Part 1, Page _ 1 _ of _ 10

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from start of discharge.

the discharges from the treatment facility to surface water shall be limited and monitored by the operator as specified below:

	Discharge			Minimum Monitoring Requirements	
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Туре
Outfall 001 - Containerized Well Developm	ent Water and/	or Pump Test Wa	ater:		
Flow	NA	Monitor	gpd	Continuous	Meter
pH(Range)	NA	6.5 to 8.5	SU	(1)	Grab
Oil and Grease	NA	15	mg/l	(1)	Grab
BOD, 5-day	NA	5	mg/l	(1)	Grab
Solids, Total Suspended	NA	10	mg/l	(1)	Grab
Solids, Total Dissolved	NA	200	mg/l	(1)	Grab
Turbidity	NA	5	NTUs	(1)	Grab
Acenaphthene	83-32-9	10	μg/l	(1)	Grab
Acenaphthylene	208-96-8	10	μg/l	(1)	Grab
Acetone	67-64-1	100.0 ²	μg/l	(1)	Grab
Acrylic acid	79-10-7	50	μg/i	(1)	Grab
Acrylonitrile	107-13-1	0.07	μg/l	(1)	Grab
Alachlor	15972-60-8	0.3	μg/l	(1)	Grab
Aldicarb	116-06-3	8.0 ²	μg/l	(1)	Grab
Methomyl	16752-77-5	40.0 ²	μg/l	(1)	Grab
Aldicarb sulfone	1646-88-4	2	μg/l	(1)	Grab
Aldicarb sulfoxide	1646-87-3	4	μg/l	(1)	Grab
Aldrin	309-00-2	0.020 ²	μg/l	(1)	Grab
Alkyl dimethyl benzyl ammonium chloride	68391-01-5	50	μg/l	(1)	Grab
Alkyl diphenyl oxide sulfonates ³	NA	50	μg/l	(1)	Grab
Aluminum, Total	NA	100	μg/l	(1)	Grab
Ametryn	834-12-8	50	μg/i	(1)	Grab
Aminomethylene phosphonic acid salts ⁴	NA	50	l/gμ	(1)	Grab
Sum of Aminopyridines	NA	1.0	μg/l	(1)	Grab
Ammonia, Total (as NH ₃)	7664-41-7	660	μg/l	(1)	Grab
Aniline	62-53-3	10.0 ²	μg/l	(1)	Grab
Anthracene	120-12-7	10	μg/l	(1)	Grab
Antimony, Total	NA .	10.0 ²	μg/l	(1)	Grab
Arsenic, Total	NA	36	μg/l	(1)	Grab
Aryltriazoles ³	NA	50	μg/l	(1)	Grab
Atrazine	1912-24-9	8.0 ²	μg/l	(1)	Grab
Azinphosmethyl	86-50-0	0.60 ²	μg/l	(1)	Grab
Azobenzene	103-33-3	0.5	μg/l	(1)	Grab
Barium, Total	NA	1,000	μg/l	(1)	Grab
Benz(a)anthracene	56-55-3	0.050 ²	μg/l	(1)	Grab

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Minimum

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from start of discharge.

the discharges from the treatment facility to surface water shall be limited and monitored by the operator as specified below:

	·			Minimum Monitoring Requirements	
O Mall Name have 0		Discharge			
Outfall Number &	CACAL	Limitations	1.1	Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Туре
Benzene	71-43-2	0.802	μg/l	(1)	Grab
Benzidine	92-87-5	0.30 ²	μg/l	(1)	Grab
Benzisothiazole	271-61-4	50	μg/l	(1)	Grab
Benzo(a)anthracene	56-55-3	10	μg/l	(1)	Grab
Benzo(b)fluoranthene	205-99-2	0.070 ²	μg/l	(1)	Grab
Benzo(k)fluoranthene	207-08-9	0.020 ²	μg/l	(1)	Grab
Benzo(ghi)Perylene	191-24-2	10	μg/l	(1)	Grab
Benzo(a)pyrene	50-32-8	0.090 ²	μg/l	(1)	Grab
Beryllium, Total	NA	3	μg/l	(1)	Grab
Bis(2-chloroethyl)ether	111-44-4	1.02	µg/l	(1)	Grab
Bis(2-ethylhexyl)phthalate	117-81-7	8.0 ²	μg/l	(1)	Grab
Boric acid, Borates & Metaborates ⁵	NA	125	μg/l	(1)	Grab
Boron, Total	NA	1,000	μg/l	(1)	Grab
Bromide, Total	NA	2,000	μg/l	(1)	Grab
Bromobenzene	108-86-1	5	μg/l	(1)	Grab
Bromochloromethane	74-97-5	5	μg/l	(1)	Grab
Bromodichloromethane	75-27-4	10	μg/l	(1)	Grab
Bromoform	75-25-2	10	μg/l	(1)	Grab
Bromomethane	74-83-9	. 5	μg/l	(1)	Grab
Butoxyethoxyethanol	112-34-5	50	μg/l	(1)	Grab
Butoxypropanol	5131 -6 6-8	50	μg/l	(1)	Grab
Butylate	2008-41-5	50	μg/l	(1)	Grab
n-Butylbenzene	104-51-8	5	μg/l	(1)	Grab
sec-Butylbenzene	135-98-8	5	μg/l	(1)	Grab
tert-Butylbenzene	98-06-6	5	μg/l	(1)	Grab
Butyl benzyl phthalate	85-68-7	50	μg/l	(1)	Grab
Butyl isopropyl phthalate	NA	50	μg/l	(1)	Grab
Cadmium, Total	NA	1.2	µg/l	(1)	Grab
Carbofuran	1563-66-2	10.02	μg/l	(1)	Grab
Carbon tetrachloride	56-23-5	0.50 ²	μg/l	(1)	Grab
Carboxin	5234-68-4	50	μg/l	(1)	Grab
Chloramben ⁶	NA	50	μg/l	(1)	Grab
Chlordane	57-74-9	0.060 ²	μg/l	· (1)	Grab
Chloride	NA	250,000	μg/l	(1)	Grab
2,3,7,8-Tetrachlorodibenzo-p-dioxin	NA	0.0080 ²	μg/l	(1)	Grab
Chlorinated dibenzo-p-dioxins and Chlorinated dibenzofurans	NA	0.0080 ²	μg/l	(1)	Grab

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from start of discharge.

the discharges from the treatment facility to surface water shall be limited and monitored by the operator as specified below:

Outfall Number & Effluent Parameter		Discharge		Minimum Monitoring Requirements			
	CAS No.	Limitations Daily Max.	Units	Measurement Frequency	Sample Type		
Chlorine, Total Residual	NA	100.02	<u></u> -	(1)	Grab		
Chlorobenzene	108-90-7	5	μg/l	(1)	Grab		
4-Chlorobenzotrifluoride	98-56-6	5	μg/1 μg/l	(1)	Grab		
Chloroethane	75-00-3	5	μg/I μg/I	(1)	Grab		
Chloroform	67-66-3	7	μg/i μg/l	(1)	Grab		
2-Chloronaphthalene	91-58-7	10	μg/I μg/I	(1)	Grab		
2-Chlorotoluene	95-49-8	5	μg/l	(1)	Grab		
4-Chlorotoluene	106-43-4	5	μg/I μg/I	(1)	Grab		
5-Chloro-o-toluidine	95-79-4	0.7	μg/۱ μg/l	(1)	Grab		
hromium, Total	95-79-4 NA	207		(1)	Grab		
Chromium, Hexavalent	NA NA	11	μg/l	• •	· Grab		
	218-01-0	0.60 ²	μg/l	(1)	Grab		
Chrysene Cobalt, Total	218-01-0 NA	5	μg/l	(1)	Grab		
Copper, Dissolved	NA NA	Monitor	μ <u>g</u> /	(1)	Grab		
• •	NA NA	24	μg/l	(1)	Grab		
Copper, Total	NA NA	60.0 ²	μg/l	(1)	Grab		
Cyanide, Amenable to Chlorination	NA NA		μg/l	(1)			
Dalapon ⁶	50-29-3	50	μg/l	(1)	Grab Grab		
4,4'-DDT		0.050 ² 0.040 ²	μg/l	(1)			
4,4'-DDD	72-54-8	0.040 ²	μg/l	(1)	Grab Grab		
4,4'-DDE	72-55-9		μg/l	(1)			
Sum of Demeton	NA	0.1	μg/l	(1)	Grab		
Dechlorane Plus	13560-89-9	5	μg/l	(1)	Grab		
Diazinon	333-41-5	0.7	μg/l	(1)	Grab		
Dibenzo(a,h)Anthracene	53-70-3	10	μg/l	(1)	Grab		
Dibromochloromethane	124-48-1	10	μg/l	(1)	Grab		
1,2-Dibromo-3-chloropropane	96-12-8	0.2	μg/l	(1)	Grab		
Dibromodichloromethane	594-18-3	5	μg/l	(1)	Grab Grab		
Dibromomethane	74-95-3	5	μg/l	(1)			
2,2-Dibromo-3-nitrilopropionamide	10222-01-2	20	μg/l	(1)	Grab		
Di-n-butyl phthalate	84-74-2	50	μg/l	(1)	Grab		
1,2-Dichlorobenzene	95-50-1	see sum of Dichlorobenzenes					
1,4-Dichlorobenzene	106-46-7	see sum of Dichlorobenzenes					
1,3-Dichlorobenzene	541-73-1	see sum of Dichlorobenzenes					
Sum of Dichlorobenzenes	NA	5	μg/l	(1)	Grab		
4-Dichlorobenzotrifluoride	328-84-7	5	μg/l	(1)	Grab		
Jichlorodifluoromethane	75-71-8	5	μg/l	. (1)	Grab		
1,1-Dichloroethane	75-34-3	5	μg/l	(1)	Grab		

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from start of discharge.

the discharges from the treatment facility to surface water shall be limited and monitored by the operator as specified below:

		Discharge		Minim Monitoring Red	
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Type
1,2-Dichloroethane	107-06-2	0.8	<u>μg/</u> l	(1)	Grab
cis-1,2-Dichloroethylene	156-59-2	5	μg/l	(1)	Grab
trans-1,2-Dichloroethylene	156-60-5	5	μg/l	(1)	Grab
1,1-Dichloroethylene	75-35-4	0.50 ²	μg/l	(1)	Grab
Dichlorofluoromethane	75-43-4	5	μg/l	(1)	Grab
2,4-Dichlorophenol	120-83-2	2.0^{2}	μg/l	(1)	Grab
2,4-Dichlorophenoxyacetic acid	94-75-7	10	μg/l	(1)	Grab
1,2-Dichloropropane	78-87-5	0.5	μg/l	(1)	Grab
1,1-Dichloropropane	78-99-9	5	μg/l	(1)	Grab
,3-Dichloropropane	142-28-9	5	μġ/l	(1)	Grab
∠,2-Dichloropropane	594-20-7	5	μg/l	(1)	Grab
1,1-Dichloropropene	563-58-6	5	μg/l	(1)	Grab
cis-1,3-Dichloropropene	10061-01-5	5	μg/l	(1)	Grab
trans-1,3-Dichloropropene	10061-02-6	5	μg/l	(1)	Grab
2,3-Dichlorotoluene	32768-54-0	5	μg/l	(1)	Grab
2,4-Dichlorotoluene	95-73-8	5	μg/l	(1)	Grab
2,5-Dichlorotoluene	19398-61-9	5	μg/l	(1)	Grab
2,6-Dichlorotoluene	118-69-4	5	μg/l	(1)	Grab
3,4-Dichlorotoluene	95-75-0	5	μg/l	(1)	Grab
3,5-Dichlorotoluene	25186-47-4	5	μg/l	(1)	Grab
Dieldrin	60-57-1	0.0080 ²	μg/l	(1)	Grab
Di(2-ethylhexyl)adipate	103-23-1	50	μg/l	(1)	Grab
Diethyl phthalate	84-66-2	50	μg/l	(1)	Grab
N,N-Dimethyl aniline	121-69-7	1.0	μg/l	(1)	Grab
Dimethylformamide	68-12-2	50	μg/l	(1)	Grab
Dimethyl phthalate	131-11-3	50	μg/l	(1)	Grab
Dimethyl tetrachloroterephthalate	1861-32-1	50	μg/l	(1)	Grab
2,6-Dinitrotoluene	606-20-2	0.080 ²	μg/l	(1)	Grab
Di-n-octyl phthalate	117-84-0	50	μg/l	(1)	Grab
Diphenamid	957-51-7	50	μg/l	(1)	Grab
1,2-Diphenylhydrazine	122-66-7	0.05	μg/l	(1)	Grab
Diquat dibromide	85-00-7	20	μg/l	(1)	Grab
Dodecylguanidine acetate	2439-10-3	see sum of Do		line acetate and	
Dodecylguanidine hydrochloride um of Dodecylguanidine acetate and	13590-97-1		guanidine hy		
dodecylguanidine hydrochloride	NA	50	μg/l	(1)	Grab
Dyphylline	479-18-5	50	μg/l	(1)	Grab

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from start of discharge.

the discharges from the treatment facility to surface water shall be limited and monitored by the operator as specified below:

		Discharge		Minime Monitoring Rea	
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Туре
Endosulfan	115-73-3	0.0202	<u>μg/</u> i	(1)	Grab
Endothall	145-73-3	50	μg/l	(1)	Grab
Endrin	72-20-8	0.020 ²	μg/l	(1)	Grab
Ethylbenzene	100-41-4	5	μg/l	(1)	Grab
Ethylene chlorohydrin	107-07-3	50	μg/l	(1)	Grab
Ethylene dibromide	106-93-4	0.05	μg/l	(1)	Grab
Ethylene glycol	107-21-1	50	μg/l	(1)	Grab
Ethylene oxide	75-21-8	0.05	μg/l	(1)	Grab
Fluometuron	2164-17-2	50	μg/l	(1)	Grab
⁻luoranthene	206-44-0	10	μg/l	(1)	Grab
fluorene	86-73-7	10	μg/l	(1)	Grab
Fluoride	NA	2000	μg/l	(1)	Grab
Glyphosate	1071-83-6	50	μg/l	(1)	Grab
Guaifenesin	93-14-1	50	μg/l	(1)	Grab
Heptachlor	76-44-8	0.010 ²	μg/l	(1)	Grab
Heptachlor epoxide	1024-74-3	0.30 ²	μg/l	(1)	Grab
Hexachlorobenzene	118-74-1	0.20 ²	μg/l	(1)	Grab
Hexachlorobutadiene	87-68-3	1.0 ²	μg/i	(1)	Grab
α-Hexachlorocyclohexane(α-BHC)	319-84-6	0.010 ²	μg/l	(1)	Grab
β-Hexachlorocyclohexane(β-BHC)	319-85-7	0.020 ²	μg/l	(1)	Grab
δ-Hexachlorocyclohexane(δ-BHC)	319-86-8	0.040 ²	μg/l	(1)	Grab
Γ-Hexachlorocyclohexane(Lindane)	58-89-9	0.020 ²	μg/l	(1)	Grab
Hexachlorocyclopentadiene	77-47-4	2.0 ²	μg/l	(1)	Grab
2-Hexanone	591-78-6	50	μg/l	(1) ·	Grab
Hexazinone	51235-04-2	50	μg/l	(1)	Grab
Hydrazine	302-01-2	5	μg/l	(1)	Grab
Hydrogen sulfide	7783-06-4	2.0	μg/l	(1)	Grab
Hydroquinone	123-31-9	2.2	μg/l	(1)	Grab
1-Hydroxyethylidene-					
1,1-diphosphonic acid	2809-21-4	50	μg/l	(1)	Grab
2-(2-Hydroxy-3,5-di-tert-					
pentylphenyl)benzotriazole	25973-55-1	50	μg/l	(1)	Grab
Indeno(1,2,3-cd)pyrene	193-39-5	0.20 ²	μg/l	(1)	Grab
Iron, Total	NA	300	μg/l	(1)	Grab
nodecyl diphenyl phosphate	29761-21-5	1.7	μg/l	(1)	Grab
sophorone	78-59-1	10	, σ, μg/l	(1)	Grab
Isopropylbenzene	98-82-8	5	μg/l	(1)	Grab

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from start of discharge.

the discharges from the treatment facility to surface water shall be limited and monitored by the operator as specified below:

	•	Disabaras		Minimo Monitoring Red	
Outfall Number &		Discharge Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Type
4-Isopropyltoluene	99-87-6	. 5	<u>μg/</u> l	(1)	Grab
Total Isothiazolones	NA	1 .	μg/l	(1)	Grab
Lead, Total	NA	4.0 ²	μg/l	(1)	Grab
Magnesium, Total	NA	35,000	μg/l	(1)	Grab
Malathion	121-75-5	0.6 ²	μg/l	(1)	Grab
Manganese, Total	NA	300	μg/l	(1)	Grab
Mercaptobenzothiazole	149-30-4	50	μg/l	(1)	Grab
Mercury, Total	NA	0.8 ²	μg/l	(1)	Grab
Methacrylic acid	79-41-4	50	μg/l	(1)	Grab
/lethoxychlor	72-43-5	0.4 ²	μg/l	(1)	Grab
(2-Methoxyethyl)benzene	4013-34-7	50	μg/l	(1)	Grab
(1-Methoxyethyl)benzene	3558-60-9	50	μg/l	(1)	Grab
Sum of Methybenz(a)anthracenes	NA	0.002	μg/l	(1)	Grab
Methyl chloride	74-87-3	5	μg/l	(1)	Grab
Methylene bisthiocyanate	6317-18-6	1.0	μg/l	(1)	Grab
Methylene chloride	75-09-2	5	μg/l	(1)	Grab
4-(1-Methylethoxy)-1-butanol	31600-69-8	50	μg/l	(1)	Grab
2-Methylethyl-1,3-dioxolane	126-39-6	50	μg/l	(1)	Grab
Methyl ethyl ketone	78-93-3	50	μg/l	(1)	Grab
2-Methylstyrene	611-15-4	5	μg/l	(1)	Grab
3-Methylstyrene	100-80-1	5	μg/l	(1)	Grab
Metribuzin	21087-64-9	50	μg/l	(1)	Grab
Mirex	2385-85-5	0.4^{2}	μg/l	(1)	Grab
Naphthalene	91-20-3	10	μg/l	(1)	Grab
Niacinamide	98-92-0	500	μg/l	(1)	Grab
Nickel, Total	NA	96	μg/l	(1)	Grab
Nitrate (as N)	NA	10,000	μg/l	(1)	Grab
Nitrilotriacetic acid ⁷	NA	3	μg/l	(1)	Grab
Nitrite	NA	20	μg/l	(1)	Grab
Nitrobenzene	98-95-3	5	μg/l	(1)	Grab
N-Nitrosodiphenylamine	86-30-6	10	. σ, μg/l	(1)	Grab
Oxamyl(Vydate)	23135-22-0	10	μg/l	(1)	Grab
Parathion	56-38-2	0.6 ²	μg/l	(1)	Grab
Methyl parathion	298-00-0	0.6 ²	. σ, μg/l	(1)	Grab
entachlorophenol	87-86-5	2 ²	μg/l	(1)	Grab
~henanthrene	85-01-8	10	μg/l	(1)	Grab
Phenolic compounds (total phenols) 11	NA	8.0 ²	μg/l	(1)	Grab

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Minimum

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from start of discharge.

the discharges from the treatment facility to surface water shall be limited and monitored by the operator as specified below:

		Discharge		Monitoring Re	
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Type
Phenyl ether	101-84-8	10	<u></u>	(1)	Grab
Phenylpropanolamine	14838-15-4	50	μg/l	(1)	Grab
cis-1-Phenyl-1-propene	766-90-5	5	μg/l	(1)	Grab
trans-1-Phenyl-1-propene	873-66-5	5	μg/l	(1)	Grab
3-Phenyl-1-propene	637-50-3	5	μg/l	(1)	Grab
Phosphorus	NA	20	μg/l	(1)	Grab
Picloram ⁶	1918-02-1	50	μg/l	(1)	Grab
PCB-1016	12674-11-2	0.30 ^{2.8}	μg/l	(1)	Grab
PCB-1221	11104-28-2	$0.30^{2.8}$	μg/l	(1)	Grab
CB-1232	11141-16-5	$0.30^{2.8}$	μg/l	(1)	Grab
'CB-1242	53469-21-9	$0.30^{2.8}$	μg/l	(1)	Grab
PCB-1248	12672-29-6	$0.30^{2.8}$	μg/l	(1)	Grab
PCB-1254	11097-69-1	$0.30^{2.8}$	μg/l	(1)	Grab
PCB-1260	11096-82-5	0.30 ^{2.8}	μg/l	(1)	Grab
Prometon	1610-18-0	50	μg/l	(1)	Grab
Propham	122-42-9	50	μg/l	(1)	Grab
n-Propylbenzene	103-65-1	5	μg/l	(1)	Grab
Pyrene	129-00-0	10	μg/l	(1)	Grab
Pyridine	110-86-1	50	μg/l	(1)	Grab
Sum of Quaternary ammonium compound	s NA	10	μg/l	(1)	Grab
Selenium, Total	NA	4 ²	μg/l	(1)	Grab
Silver, Total	NA	200	μg/l	(1)	Grab
Simazine	122-34-9	8 ²	μg/l	(1)	Grab
Styrene	100-42-5	50	μg/l	(1)	Grab
Sulfate	NA	250,000	μg/l	(1)	Grab
Sulfides, Total	NA	50	µg/l	(1)	Grab
Sulfite	NA	200	μg/l	(1)	Grab
Tebuthiuron	34014-18-1	50	μg/l	(1)	Grab
Terbufos	13071-79-9	100.0 ²	μg/l	(1)	Grab
Sum of Tetrachlorobenzenes	12408-10-5	10	μg/i	(1)	Grab
1,1,1,2-Tetrachloroethane	630-20-6	5	μg/l	(1)	Grab
1,1,2,2-Tetrachloroethane	79-34-5	0.2	μg/l	(1)	Grab
Tetrachloroethylene	127-18-4	0.7	μg/l	(1)	Grab
Tetrahydrofuran	109-99-9	50	μg/l	(1)	Grab
nallium, Total	NA	4	μg/l	(1)	Grab
neophylline	58-55-9	40	μg/l	(1)	Grab
Terbufos	13071-79-9	100.0 ²	μg/l	(1)	Grab

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Minimum

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from start of discharge.

the discharges from the treatment facility to surface water shall be limited and monitored by the operator as specified below:

		Discharge		Monitoring Red	
Outfall Number &		Limitations		Measurement	Sample
Effluent Parameter	CAS No.	Daily Max.	Units	Frequency	Туре
Sum of Tetrachlorobenzenes	12408-10-5	10	μg/l	(1)	Grab
1,1,1,2-Tetrachloroethane	630-20-6	5	μg/l	(1)	Grab
1,1,2,2-Tetrachloroethane	79-34-5	0.2	μg/l	(1)	Grab
Tetrachloroethylene	127-18-4	0.7	μg/l	(1)	Grab
Toluene	108-88-3	5	μg/l	(1)	Grab
o-Toluidine	95-53-4	10 ²	μg/l	(1)	Grab
Tolytriazole	29385-43-1	50	μg/l	(1)	Grab
Toxaphene	8001-35-2	1.0 ²	μg/l	(1)	Grab
1,2,4-Tribromobenzene	615-54-3	5	μg/l	(1)	Grab
Tributyltin oxide	56-35-9	50	μg/l	(1)	Grab
oum of Trichlorobenzenes	12002-48-1	10	μg/l	(1)	Grab
1,1,1-Trichloroethane	71-55-6	5	μg/l	(1)	Grab
1,1,2-Trichloroethane	79-00-5	0.6	μg/l	(1)	Grab
Trichloroethylene	79-01-6	3	μg/l	(1)	Grab
Trichlorofluoromethane	75-69-4	5	μg/l	(1)	Grab
2,4,5-Trichloro-phenoxypropionic acid	93-72-1	. 10	μg/l	(1)	Grab
1,1,2-Trichloropropane	598-77-6	5	μg/l	(1)	Grab
1,2,3-Trichloropropane	96-18-4	5	μg/l	(1)	Grab
cis-1,2,3-Trichloropropene	13116-57-9	5	μg/l	(1)	Grab
trans-1,2,3-Trichloropropene	13116-58-0	5	μg/l	(1)	Grab
alpha,2,4-Trichlorotoluene	94-99-5	5	μg/l	(1)	Grab
alpha,2,6-Trichlorotoluene	2014-83-7	5	μg/l	(1)	Grab
alpha,3,4-Trichlorotoluene	102-47-6	5	μg/l	(1)	Grab
alpha,alpha,2-Trichlorotoluene	88-66-4	5	μg/l	(1)	Grab
alpha,alpha,4-Trichlorotoluene	13940-94-8	5	μg/l	(1)	Grab
2,3,4-Trichlorotoluene	7359-72-0	0.34	μg/l	(1)	Grab
2,3,5-Trichlorotoluene	56961-86-5	0.34	µg/l	(1)	Grab
2,3,6-Trichlorotoluene	2077-46-5	0.34	μg/l	(1)	Grab
2,4,5-Trichlorotoluene	6639-30-1	0.34	μg/l	(1)	Grab
2,4,6-Trichlorotoluene	23749-65-7	0.34	μg/l	(1)	Grab
1,1,1-Trichloro-2,2,2-trifluoroethane	354-58-5	5	μg/l	(1)	Grab
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5	μg/l	(1)	Grab
1,2,3-Trimethylbenzene	526-73-8	5	µg/l	(1)	Grab
1,2,4-Trimethylbenzene	95-63-6	5	µg/l	(1)	Grab
3,5-Trimethylbenzene	108-67-8	5	μg/l	(1)	Grab
,3,6-Trimethylpyridine	1462-84-6	50	μg/l	(1)	Grab

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the start of each discharge event

and lasting until 7 days from start of discharge.

the discharges from the treatment facility to surface water shall be limited and monitored by the operator as specified below:

		Discharge		Minimu Monitoring Red	
Outfall Number & Effluent Parameter	CAS No.	Limitations Daily Max.	Units	Measurement Frequency	Sample Type
2,4,6-Trimethylpyridine	108-75-8	50	μg/l	(1)	Grab
Triphenyl phosphate	115-86-6	4	μg/l	(1)	Grab
Vanadium, Total	NA	14	μg/l	(1)	Grab
Vinyl chloride	75-01-4	0.70 ²	μg/l	(1)	Grab
1,2-Xylene	95-47-6	5 .	μg/l	(1)	Grab
1,3-Xylene	108-38-2	5	μg/l	(1)	Grab
1,4-Xylene	106-42-3	5	μg/l	(1)	Grab
Zinc, Total	NA	166	μg/l	(1)	Grab

ootnotes:

- (1) Samples must be collected prior to each discharge event. Discharge may not commence until the sample results show compliance with the above discharge limitations.
- (2) Discharge limit is set at the Practical Quantitation Limit (PQL). Actual surface water effluent standard/limitation is below this limit.
- (3) Limit applies to each isomer individually.
- (4) Limit applies to each salt individually.
- (5) Limit applies as boron equivalents to the sum of these substances.
- (6) Limit includes forms that convert to the organic acid upon acidification to a pH of 2 or less; and esters of the organic acid.
- (7) Includes related forms that convert to nitrilotriacetic acid upon acidification to a pH of 2.3 or less.

SEE PAGE 10 OF 10 FOR ADDITIONAL FOOTNOTES.

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Footnotes (continued):

- (8) a. The treatment plant operator must monitor this discharge for PCBs using USEPA laboratory method 608. The laboratory must make all reasonable attempts to achieve a Minimum Detection Level (MDL) of 0.065 μg/l.
 - b. 0.065 μ g/l is the discharge goal. The treatment plant operator shall report all values above the MDL (0.065 μ g/l per Aroclor). If the level of any Aroclor is above 0.065 μ g/l, the treatment plant operator must evaluate the treatment system and identify the cause of the detectable level of PCBs in the discharge.
 - c. If the Department determines that effluent monitoring results above 0.065 μg/l can be prevented by implementation of additional measures as proposed by the treatment plant operator in footnote 10.b above, and approved by the Department, the treatment plant operator shall implement such additional measures.
- (8) Only site generated pump test and containerized well development water are authorized for treatment and discharge.
- (9) Samples and measurements, to comply with the monitoring requirements specified above, must be taken from the holding tank prior to discharge to any on-site surface waters including drainage channels, the East Drainage Swale, and/or the detention basin.
- (10) Discharge is not authorized until such time as an engineering submission showing the method of treatment and discharge is approved by the Department. The discharge rate may not exceed the effective treatment system capacity. All monitoring data, engineering submissions and modification requests must be submitted to the following DER contact person: MACTEC Engineering and Consulting, P.C.______.
- (11) Total phenolics must be analyzed using EPA Methods 420.1 or 420.2.
- (12) Discharge to a surface water body within the New York City Watershed is not authorized by these effluent criteria. Seperate review of any proposed discharge to a surface water within the New York City Watershed is required.

SECTION 02300

EARTHWORK

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section covers excavation, filling/backfilling, compaction, and grading. The Work includes:
 - 1. Excavation and filling of landfilled wastes and waste soils.
 - 2. Establishing landfill subgrade.
 - 3. Placing, grading, and compacting the landfill cover system soils.
 - 4. Excavation, backfill, and compaction for stormdrain structures and piping.
 - 5. Placement and compaction of the following materials:
 - a. Select Borrow;
 - b. Crushed Stone;
 - c. Aggregate Base;
 - d. Cover Soil; and
 - e. Riprap
 - 6. Finish grading of all disturbed areas;
 - 7. Geotechnical laboratory testing of borrow source and existing (in-place) materials;
 - 8. Other miscellaneous earthwork activities.
- B. Control of surface water run-off during construction shall be in accordance with Section 02370 - Erosion and Sedimentation Control and Section 02245 - Construction Water Management.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01330 Submittal Procedures
- B. Section 01560 Dust and Odor Control
- C. Section 02110 Waste Removal and Handling
- D. Section 02120 Off-Site Transportation and Disposal
- E. Section 02245 Construction Water Management
- F. Section 02370 Erosion and Sedimentation Control

1.03 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

A. American Society for Testing and Materials (ASTM):

- 1. ASTM C 33 (1993) Standard Specification for Concrete Aggregates;
- 2. ASTM C 88 (1999a) Standard Test for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate;
- 3. ASTM C 127 (1993a) Test Method for Specific Gravity and Absorption of Coarse Aggregate;
- 4. ASTM C 131 (2001) Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine;
- 5. ASTM C 136 (1996a) Sieve Analysis of Fine and Coarse Aggregates;
- 6. ASTM D 422 (1998) Standard Test Method for Particle-Size Analysis of Soils;
- 7. ASTM D 535 (1989) Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine;
- 8. ASTM D 854 (1992) Test Method for Specific Gravity of Soils;
- 9. ASTM D 1140 (1997) Amount of Material in Soils Finer than the No. 200 (75-micrometer) Sieve;
- 10. ASTM D 1557 (2000) Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lb f/ft³);
- 11. ASTM D 2216 (1998) Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soils and Rock by Mass;
- 12. ASTM D2487 (2000) Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System);
- 13. ASTM D 2922 (2001) Standard Test Methods for Density of Soil and Soil-Aggregate In Place by Nuclear Methods (Shallow Depth);
- 14. ASTM D 2974 (2000) Standard Test Method for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils;
- 15. ASTM D 3017 (2001) Standard Test Method for Water Content of Soil and Rock by Nuclear Methods (Shallow Depth);
- 16. ASTM D 3740 (2001) Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction;
- 17. ASTM D 4972 (2001) Standard Test Method for pH of Soils;
- 18. ASTM D 5101 (2001) Standard Test Method for Measuring the Soil-Geotextile System Clogging Potential by the Gradient Ratio;
- 19. ASTM D 6938 (2008a) Standard Test Methods for In-Place density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

B. New York State Department of Transportation (NYSDOT):

1. NYSDOT SS - (2006) Standard Specifications

C. US Composting Council (USCC):

1. Test Methods for the Examination of Composting and Compost (TMECC)

1.04 SUBMITTALS

Submit to the Engineer for approval the following in accordance with Section 01330 - Submittal Procedures:

A. Borrow Source(s):

The Contractor shall provide the proposed source(s) for borrow material prior to initiation of work. Available/previous laboratory testing data shall be provided.

B. Contractor's Quality Control Testing Laboratory:

The name and qualifications of an independent third-party commercial testing laboratory to be used for borrow source and in-place soil/construction materials testing shall be submitted as soon as possible, but no later than 7 days following Notice to Proceed.

C. Test Reports:

The testing laboratory shall submit an electronic (pdf format) testing laboratory report to the Engineer, with copy to the Contractor:

- 1. All test reports for borrow source materials.
- 2. At least one moisture density curve for each type of borrow source material and native soil to be utilized.
- 3. Field in-place density (compaction) test reports.

1.05 JOB CONDITIONS:

A. Site Information:

- 1. Subsurface soil boring information is included in the Limited Site Data document. However, variations may exist in the subsurface conditions between boring locations.
- Data provided on subsurface conditions are not intended as representations or warranties of accuracy or continuity between soil borings. It is expressly understood that neither the New York State Department of Environmental Conservation (Department) nor the Engineer will be responsible for interpretations or conclusions drawn there from by Contractor. Data are made available for the convenience and information of the Contractor. Additional test borings and other exploratory operations may be made by Contractor at no cost to Department.

B. Existing Utilities:

- 1. The Contractor shall locate existing underground utilities in the areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations.
- Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the Utility Owner immediately for directions. Cooperate with the Department and utility companies in keeping respective services and facilities in operation. The Contractor shall repair damaged utilities to satisfaction of the Utility Owner.
- 3. Do not interrupt existing utilities serving facilities occupied and used by the Department or others, except when permitted in writing by Engineer and then only after acceptable temporary utility services have been provided.
- 4. See Section 00330 Existing Conditions for additional information.

C. Use of Explosives:

1. Use of explosives shall not be allowed.

D. Protection of Persons and Property:

- 1. Barricade and mark open excavations occurring as part of this work in accordance with applicable standards.
- 2. Protect structures, utilities, sidewalks, pavements, and other facilities designated to remain from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations and truck traffic.

1.06 DEFINITIONS

A. Waste:

On-site landfilled municipal and industrial solid wastes that contain contamination consistent with and typical of municipal landfills. Some industrial and potentially hazardous wastes have been identified at the site, mostly in the form of drums buried in the landfill. Drums are considered potentially hazardous.

B. Leachate:

Liquid waste that contains contaminants due to contact with landfilled waste. Leachate is typically generated as the result of stormwater contacting waste via runoff or percolation/infiltration.

C. Unsatisfactory Soil/Material:

Unsatisfactory soils/materials include but are not limited to peat and/or highly organic soils (classified as OL, OH, or PT by ASTM D 2487), grubbings greater than 6 inch in size, stumps/brush, trash, refuse, debris, frozen soils, soils containing materials greater than the allowable size (see below), saturated soils, fine-grained soils above their liquid limit at the time of compaction, and soils which when left in place are either too wet or too dry to compact, as determined by the Engineer.

D. Satisfactory Soil/Material:

Satisfactory soils/materials shall meet the requirements specified in Part 2 of this Section and shall be used in areas as shown on the Construction Contract Drawings or as directed by the Engineer. In addition, satisfactory soils/materials shall satisfy the following conditions:

- 1. Satisfactory soils/materials shall be free of all Unsatisfactory Soil/Material conditions listed above;
- 2. Satisfactory soils from on-site sources shall be free of material greater than 4 inches any direction, unless otherwise specified or approved by the Engineer. Furthermore, the maximum particle size shall not exceed ½ of the specified maximum lift thickness, unless otherwise specified; and
- 3. Satisfactory soils from off-site borrow sources shall be free of materials greater than 4 inches in any direction (excludes Riprap), unless otherwise specified or approved by the Engineer. Furthermore, the maximum particle size shall not exceed ½ of the specified maximum lift thickness, unless otherwise specified.
- 4. Grubbings 6 inches in diameter or less when filled in the designated on-site area.

E. Cohesionless and Cohesive Soils:

Cohesionless soils include gravels, sand-gravel mixtures, sands, and gravelly-sands, classified as GW, GP, SW, or SP by the Unified Soil Classification System (ASTM D 2487). Cohesive soils include clayey gravels, sand-clay mixtures, clayey sands, clays, and silts, classified as GC, SC, CL, CH, ML, or MH by the Unified Soil Classification System (ASTM D 2487). Soils classified as GM and SM will be identified as cohesionless only when the "fines" are determined to be non-plastic. Testing required for the classification of soil shall be in accordance with ASTM D 4318, ASTM C 136, ASTM D 422, and ASTM D 1140.

F. Degree of Compaction:

Degree of compaction (percent compaction) required is expressed as a percentage of the maximum dry density, at the optimum moisture content. The maximum dry density and optimum moisture content shall be obtained by the test procedure presented in ASTM D 1557.

G. Excavation Limit:

The horizontal and vertical extent of the proposed excavation defined by the excavation contours shown on Construction Contract Drawings C-102 and C-103.

1.07 QUALITY ASSURANCE:

A. Codes and Standards:

Perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction.

1.08 ON-SITE EXCAVATED MATERIALS

- A. Off-Site Disposal: all soils/materials obtained from on-site excavations shall be consolidated/landfilled within the new solid waste boundary with the following exceptions:
 - 1. grubbings (e.g. stumps) with diameters greater than 6 inches.
 - 2. bulky wastes.
 - 3. drums/drum remnants, and their associated contents (liquid and/or solid) that through waste characterization testing are classified as hazardous.
 - 4. drum/drum remnants and their associated liquid content regardless of classification through waste characterization testing.
 - 5. visually impacted soils directly adjacent to drum/leaking drum/drum remnants that may be impacted by contact with former leaked/spilled contents and through waste characterization testing are classified as hazardous.
- B. On-Site waste consolidation/landfilling: the following soil/materials obtained from onsite excavations shall be consolidated/landfilled within the new solid waste boundary:
 - 1. grubbings (e.g. stumps) with diameters less than 6 inches.
 - 2. drums/drum remnants, and their associated contents (solid, semi-solid, or sludge) that through waste characterization testing are classified as non-hazardous.
 - 3. visually impacted soils directly adjacent to drum/leaking drum/drum remnants that may be impacted by contact with former leaked/spilled contents and through waste characterization testing are classified as non-hazardous.
 - 4. solid waste outside the new solid waste boundary.
 - 5. soil/waste soil excavated between the existing solid waste boundary and the limit of excavation.
- C. Re-use of on-site excavated soil outside the new solid waste boundary:
 - 1. Soil excavated between the existing solid waste boundary and the limit of excavation that is determined to be satisfactory soil through field screening may be re-used on-site as Select Borrow.
 - 2. Acceptance for re-use is contingent on the material not exhibiting the following characteristics:
 - a. Visible sheening or staining.
 - b. Containing tar, ash, wood chips, glass, or other waste mixed with the
 - c. Napthalene, petroleum, or other strong chemical odor.

PART 2 - PRODUCTS

2.01 SELECT BORROW

- A. Select Borrow may be re-used excavated on-site soil or imported soil for one of the following purposes:
 - 1. filling within the new solid waste boundary to establish subgrade to meet the grading performance criteria for the project; or
 - 2. filling outside the new solid waste boundary to establish final grade.
- B. Select Borrow shall consist of earth, suitable for embankment construction. It shall be free from frozen materials, perishable rubbish, peat, and other Unsatisfactory Soil/Material. It shall be of such a nature and character that it can be compacted to the specified density (Sub-Part 3.11).
- C. The moisture content shall be sufficient to provide the required compaction and a stable embankment. In no case shall the moisture content exceed 4% above optimum, which shall be determined in accordance with ASTM D 1557.
- D. Imported Select Borrow shall meet the Unrestricted Soil Cleanup Objectives as described in 6 NYCRR 375, Table 375-6.8(a).
- E. Re-used on-site soil may be classified as Select Borrow provided it meets the other requirements of this subpart and passes field screening.
- G. Select Borrow shall not be imported to the Site without specific written authorization from the Engineer.
 - 1. During the work, the Contractor shall notify the Engineer as early as possible of the potential need for imported Select Borrow to achieve the subgrade elevations.

2.02 CRUSHED STONE

A. Crushed Stone shall be used as bedding for culverts and sediment basin underdrain pipe. Crushed stone shall consist of material meeting the requirements of NYSDOT SS Type1 (3/4-inch).

2.03 AGGREGATE BASE

- A. Aggregate Base shall be provided to construct the Perimeter Access Road, Access Road, and Gravel Area as shown on the Construction Contract Drawings.
- B. Aggregate Base shall meet the requirements of NYSDOT SS Type 2 or Type 4 aggregate.

2.04 COVER SOIL

- A. Cover Soil is used to construct the landfill cover system above established subgrade to prevent direct exposure to landfilled wastes and reduce the potential for stormwater percolation/infiltration through the waste.
- B. Cover Soil shall be free from frozen materials, perishable rubbish, peat, and other Unsatisfactory Soil/Material.
- C. Cover Soil shall be classified as a fine-grained soil with a maximum particle size of 2-inches and at least 35 percent by weight passing the No. 200 sieve.
- D. Cover Soil shall meet the Unrestricted Soil Cleanup Objectives as described in 6 NYCRR 375, Table 375-6.8(a).

2.05 TOPSOIL

- A. Natural topsoil with the following properties:
 - 1. Loose, friable topsoil, free of refuse, brush, stumps, roots, rocks, cobbles, stones, noxious weeds, litter and any other materials that are longer than 1 inch in any dimension and which will prevent the formation of a suitable seed bed.
 - 2. Classified as Sandy Loam in accordance with the United States Department of Agriculture (USDA) soil textural classification system.
- B. Manufactured topsoil from a combination of a mixing soil and composted biosolids.
 - 1. Mixing soil shall be free of refuse, brush, stumps, roots, rocks, cobbles, stones, noxious weeds, litter and any other materials that are longer than 1 inch in any dimension.
 - 2. Biosolids shall meet the requirements of Class A Biosolids as defined in 40 CFR Part 503.
 - 3. Composted biosolids shall meet the requirements of the US Composting Council's Seal of Testing Assurance Program.
- C. Organic matter shall not constitute less than 4 percent or more than 20 percent as determined by loss-on-ignition testing of oven dried samples.
- D. A pH between 5.5 and 7.5.
- E. Topsoil shall meet the Unrestricted Soil Cleanup Objectives as described in 6 NYCRR 375, Table 375-6.8(a).
- F. Soil Nutrient Analysis: Samples of the Topsoil shall be submitted to the Cornell University Nutrient Testing Laboratory or other similarly qualified testing facility. Nutrient analysis shall include testing for concentrations of Extractable Nutrients (P, K, Ca, Mg, Fe, Mn, Zn, Cu, B), Extractable Heavy Metals (Pb, Cd, Ni, Cr), and Extractable Aluminum; Cation Exchange Capacity; and Percent Base Saturation. In conjunction with other analytical testing noted in Sub-Part 2.05 (pH, Organic Content, and Soluble Salts), the laboratory shall recommended augmentation to the Topsoil to adjust the nutrients and pH levels for optimization as a growing medium for the given permanent seed mixture

(specified in Section 02921 – Seeding and Soil Supplements). Recommendations shall include lime and fertilizer applications rates.

2.06 RIPRAP

- A. Riprap shall be hard, durable, and angular field or quarry material that is not subject to weathering or readily breaking down when exposed to water.
- B. Specific gravity of should be at least 2.5.
- C. Riprap sizes shall be as indicated on the Construction Contract Drawings.
- D. Riprap gradations shall be as provided in Table 5B.3 of the <u>New York State Standards</u> and <u>Specifications for Erosion and Sediment Control</u>, by the New York State Department of Conservation, dated August 2005 and as listed below:

Percent Finer by Weight	D50	D100
Size (inches)	3	4.5
Size (inches)	8	12

2.07 BORROW SOURCE TESTING

Borrow source testing, including geotechnical characterization requirements, shall be conducted on all soil materials proposed for construction. Third-party geotechnical laboratory testing requirements and frequency for materials shall be as listed below.

A.	Crushed Stone: <u>Test</u> Sieve Analysis	Methodology ¹ ASTM C 136	Frequency ² 1 test/500 cy
B.	Aggregate Base: Test Posticle Size Analysis	Methodology ¹ ASTM D 422	Frequency ²
	Particle-Size Analysis (to #200 Sieve)		1 test/500 cy
C.	Modified Proctor Select Borrow:	ASTM D 1557	1 test/source/material
C.	Test	Methodology ¹	Frequency ²
	Particle-Size Analysis (to #200 Sieve)	ASTM D 422	1 test/1,000 cy
	Modified Proctor	ASTM D 1557	1 test/1,000 cy

D. Cover Soil:

<u>Test</u>	$\underline{\text{Methodology}}^{1}$	Frequency ²
Particle-Size Analysis	ASTM D 422	1 test/1,000 cy
(to #200 Sieve)		
Modified Proctor	ASTM D 1557	1 test/1.000 cv

E. Topsoil:

Topson.		
<u>Test</u>	$\underline{\text{Methodology}}^{1}$	Frequency ²
Particle-Size Analysis ³	ASTM D 422	1 test/2,000 cy
(with hydrometer analysis)		(Note 3)
Organic Content	ASTM D 2974	1 test/1,000 cy
pH	ASTM D 4972	1 test/1,000 cy
Soluble Salt Content	ASTM D 4542	1 test/1,000 cy
Soil Nutrient Analysis ⁵	(multiple)	1 test/1,000 cy
		(Note 4)

Notes:

- 1. Other testing methods may be considered acceptable, based on prior approval of the Engineer.
- 2. Testing frequency shall be as listed, at any change in borrow source, or at any discernable change in material delivered to the site (as determined by the Engineer).
- 3. The percentages of sand, silt, and clay in the soil shall be calculated and reported based on the results of the particle size analysis. These components shall be used to perform a Soil Textural Class Analysis in accordance with the USDA Soil Textural Classification System. The USDA textural class for the soil shall be included in the report.
- 4. See Sub-Part 2.05F.

PART 3 - EXECUTION

3.01 INSPECTION

A. Examine the areas and conditions under which excavating, filling, and grading are to be performed and notify the Engineer, in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

3.02 EXCAVATION

A. General:

Excavation consists of removal and disposal of material encountered when establishing required subgrade elevations. During construction, excavation and fill shall be performed in a manner and sequence that will provide proper drainage at all times.

B. Excavation for Foundations and/or Structures:

1. Conform to elevations and dimensions shown within a vertical tolerance of 0.05 feet, and extending a sufficient horizontal distance from footings and foundations to permit placing and removal of concrete formwork, installation of services, other construction, and for inspection.

C. Excavation for Pavements:

1. Conform to subgrade elevations and dimensions shown, within a horizontal and vertical tolerance of 0.10 feet.

D. Excavation for Trenches:

- 1. Conform to elevations and dimensions within a horizontal and vertical tolerance of 0.10 feet. Excavate to the uniform width shown or required for the particular item to be installed. Provide adequate working space for compactive equipment.
- 2. Excavate trenches to the depth indicated or required. Carry the depth of trenches for piping to establish the indicated flow lines and invert elevations and provide suitable bedding.
- 3. Do not backfill trenches until authorized by the Engineer. Use care in backfilling to avoid damage or displacement of piping and associated drainage structures, and geosynthetics.

E. Site Excavation:

1. Conform to elevations and dimensions shown within a vertical and horizontal tolerance of 0.10 feet. Excavate to a depth to provide for any subsequent Cover System materials or other specified surface material.

3.03 STABILITY OF EXCAVATIONS

- A. Slope sides of excavations to comply with applicable codes and ordinances. Shore and brace where sloping is not possible because of space restrictions or stability of material excavated.
- B. Maintain sides and slopes of excavations in a safe condition until completion of backfilling, or longer if specified or directed by the Engineer.

C. Where excavation sidewalls cannot be sloped properly to meet safety requirements, trench excavations must be supported by an engineered shoring system.

3.04 SHORING AND BRACING

- A. Provide materials for shoring and bracing, such as sheet piling, uprights, stringers and cross-braces, in good serviceable condition.
- B. Establish requirements for trench shoring and bracing to comply with codes and ordinances of authorities having jurisdiction.

3.05 SOIL/MATERIAL HANDLING AND STORAGE:

- A. During daily excavation activities, locate and retain soil materials away from edge of excavations. All temporary/daily stockpiles shall be maintained a sufficient distance from the excavation to prevent loading of the slope and to provide for stability of the slope.
- B. The Contractor shall store/stockpile excavated materials within the limit of the work as shown on the Construction Contract Drawings. Designated storage/stockpile areas shall be established for the following soils/materials, at a minimum:
 - 1. Contaminated Soil/Material excavated during execution of the Work.
 - 2. Imported soils and aggregates as required.
- C. During excavation Contaminated Soil/Material may be segregated from Non-Contaminated Soil/Material.
 - Contaminated Soil/Material removed from the excavation area shall be transported directly to a designated storage/stockpile area, for characterization sampling, and subsequent disposal in accordance with Section 02110 – Waste Removal and Handling and Section 02120 – Off-Site Transportation and Disposal.
 - Non-Contaminated Soil/Material removed from the excavation area may be segregated to a separate designated storage/stockpile area, for characterization, and subsequent disposal in accordance with Section 02110 Waste Removal and Handling.
- D. The Contractor shall place, grade, and shape stockpiles to provide for proper drainage. Furthermore, stockpiles shall incorporate appropriate erosion and sedimentation controls in accordance with Section 02370 - Erosion and Sedimentation Control, to prevent the off-site migration of sediments.
- E. Storage of Contaminated Soils/Materials:
 - 1. Stockpiles of Contaminated Soil/Material shall be constructed to isolate contaminated material from the environment. The maximum stockpile size shall be 500 cubic yards. Stockpiles shall be constructed to include:

- a. A chemically resistant geomembrane liner. Non-reinforced geomembrane liners shall have a minimum thickness of 20 mils. Scrim reinforced geomembrane liners shall have a minimum weight of 40 lbs. per 1000 square feet. The ground surface on which the geomembrane is to be placed shall be free of rocks greater than 0.5 inches in diameter and any other object which could damage the membrane.
- b. Geomembrane cover to prevent precipitation from entering the stockpile. Non-reinforced geomembrane covers shall have a minimum thickness of 10 mils. Scrim reinforced geomembrane covers shall have a minimum weight of 26 lbs. per 1000 square feet. The cover material shall be anchored to prevent it from being removed by wind.
- c. Berms surrounding the stockpile, a minimum of 12 inches in height. Vehicle access points shall also be bermed.
- d. Storage and removal of liquid which collects in the stockpile shall be in accordance with Sub-Part 3.05E.3.
- e. Inspection of the stockpile areas will be conducted on a weekly basis (at a minimum), or following a significant precipitation event and/or as requested by the Engineer.

2. Roll-Off Units:

- a. Water-tight roll-off units may be used to temporarily store Contaminated Soil/Material.
- b. An impermeable cover shall be placed over the units to prevent precipitation from contacting the stored material.
- c. The units shall be located in the staging/storage area, as shown on the Construction Contract Drawings or as directed by the Engineer.
- d. Liquid which collects inside the units shall be removed and stored in accordance with Sub-part 3.05E.3.

3. Liquid Storage

- a. Liquid collected from excavations and stockpiles shall be temporarily stored in 55-gallon barrels.
- b. Liquid storage containers shall be water-tight and shall be located in the staging/storage area, as shown on the Construction Contract Drawings or as directed by the Engineer.
- F. Dispose of excess soil material and waste materials as specified herein and in accordance with Section 02120 Off-Site Transportation and Disposal.

3.06 COLD WEATHER PROTECTION

A. Protect excavation bottoms against freezing when atmospheric temperature is less than 35°F.

3.07 CLOSING ABANDONED UNDERGROUND UTILITIES

- A. Close open ends of abandoned underground utilities, indicated to remain, permanently with closures sufficiently strong to withstand pressures which may result after closing.
- B. Close open ends of metallic conduit and pipe with threaded galvanized metal caps or plastic plugs, or other suitable method for the type of material and size of pipe. Do not use wood plugs.
- C. Close open ends of concrete and masonry utilities with not less than 8" thick brick masonry bulkheads, constructed to completely fill the opening.
 - 1. Wet brick before laying. Lay brick in mortar so as to form a full bed with ends and side joints in one operation. Joints shall not be more than three-eighths (3/8) of an inch wide. Protect fresh masonry from freezing or from rapid drying, as necessary, and maintain protection until mortar has set.

3.08 GRADING

A. General:

The Contractor shall uniformly grade areas within the limit of grading. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.

- B. Finish surfaces to be free from irregular surface changes.
- C. The landfill grading shall meet the grading performance criteria including:
 - 1. Maximum allowable subgrade/final grade slope is 3:1 or 33 percent.
 - 2. Minimum allowable subgrade/final grade slope is 20:1 or 5 percent.
- D. Tolerance: The allowable tolerance for constructed subgrade/final grade landfill slopes is 2.92:1 or 34.3 percent. The slope shall be calculated by averaging survey elevations measured at 10 foot intervals along a cross section extending from the invert of each slope bench to the top of berm of the corresponding upgradient slope bench. Cross sections shall be checked at a minimum 25 foot interval parallel with the slope.

3.09 SUBGRADE PREPARATION

- A. Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Bench, plow, strip, scarify, or break-up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface.
- B. Subgrade Compaction:
 - 1. Foundation and/or Footing Subgrades:
 - a. Prior to setting forms and/or placing concrete, foundation and/or footing subgrade surfaces shall be examined by the Engineer. The examination may include visual observations, hand-rod probing, and compaction testing.
 - b. Foundation and/or footing subgrades shall be level or suitably benched and free of loose soil, ponded water, and debris. Any loose, soft, wet, frozen, or otherwise unsuitable soils observed should either be re-compacted or undercut to a suitable subgrade, as determined by the Engineer.
 - c. Any undercut/excavated material should be replaced/backfilled with granular Select Borrow, Gravel, or lean concrete, as recommended by the Engineer. Fill materials should be placed and compacted as specified herein.

2. Paved Areas:

- a. Parking Areas: Compact exposed subgrade surfaces to at least 95% of maximum dry density.
- b. Any loose, soft, wet, frozen, or otherwise unsuitable soils observed should either be re-compacted or undercut to a suitable subgrade, as determined by the Engineer.
- c. Any undercut/excavated material should be replaced/backfilled with granular Select Borrow. Fill materials should be placed and compacted as specified herein.

3. Pipe Trenches:

a. Compact exposed subgrade surfaces to at least 90% of maximum dry density.

3.10 BACKFILL AND FILL

A. General:

Place acceptable soil material of the type indicated on the Construction Contract Drawings in layers to required subgrade elevations. Do not place backfill or fill material on surfaces

that are muddy, frozen, or contain frost or ice. Placement of backfill or fill shall not be allowed.

- B. Backfill excavations as promptly as work permits, but not until completion of the following:
 - 1. Acceptance by Engineer of construction below finish grade.
 - 2. Inspection, testing, approval, and recording locations of underground utilities.
 - 3. Removal of trash and debris.

C. Fill/Backfill Placement:

- 1. Place granular backfill and fill materials in layers not more than 12 inches in loose depth for material compacted by heavy compaction equipment (i.e. paved areas), unless otherwise specified.
- 2. Place granular backfill and fill materials in layers not more than 6 inches in loose depth for material compacted by hand-operated tampers or hydraulic equipment (i.e. pipe trenches), unless otherwise specified.
- D. Before compaction, moisten or aerate each layer as necessary to provide the optimum moisture content. Compact each layer to required percentage of maximum dry density (Sub-Part 3.11).
- E. Place backfill and fill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill against structures by carrying the material uniformly around structure to approximately same elevation in each lift.

3.11 COMPACTION

- A. Consolidated landfill solid waste or regraded solid waste shall be placed in lifts no thicker than 4 feet and compacted with several passes of a sheepsfoot roller until no appreciable change in elevation is observed.
- B. Waste soil excavated on-site may be placed in a maximum12 inch lift and compacted with several passes of a sheepsfoot or smooth drum roller.
- C. General:
 - Control soil compaction during construction providing minimum percentage of density specified for each area classification.
- D. Percentage of Maximum Density Requirements:

 Compact soil to not less than the following percentages of maximum dry density (determined in accordance with ASTM D 1557).
 - 1. Landfill (Select Borrow and Soil Cover): Compact each layer of fill material to at least 90% of maximum dry density.
 - 2. Pipe Trenches: Compact Pipe Bedding material and each layer of backfill to six (6) inches over the pipe to at least 90% of maximum dry density. Backfill placed above 6 inches over the pipe shall be compacted in accordance with the applicable surface treatment condition, as shown on the Construction Contract Drawings and as specified above.

3. Roads: Compact Aggregate Base material to at least 95% of maximum dry density.

E. Moisture Control:

- 1. Where subgrade or a layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, in proper quantities to prevent free water appearing on surface during or subsequent to compaction operations.
- 2. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.
- 3. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing, or pulverizing until moisture content is reduced to a satisfactory level.

F Method:

- 1. For landfill surfaces, static or vibratory methods may be used as required to achieve density. A sheepfoot roller shall be employed to compact landfill waste and Cover Soil. All other surfaces may use smooth steel drum compaction equipment. The maximum compacted lift depth shall be 4 foot for landfilled waste, 12 inches for Select Borrow, and 9 inches for Cover Soil.
- 2. Installation of course-grained materials such as Aggregate Base and Crushed Stone shall be completed by vibratory methods of compaction using a steel drum roller or plate compacter. The maximum compacted lift depth shall be 1 foot for material compacted with a steel drum roller and 6 inches for material compacted with a plate compactor.
- G. Tolerances: Installed compacted lift thickness shall not exceed the maximum allowable depth by more than 1 inch (0.083 feet).

3.12 FIELD QUALITY CONTROL TESTING

- A. Quality Control Testing During Construction:
 - 1. Allow testing service to examine and test subgrade surfaces and fill/backfill layers. Before further construction work is performed, test results meeting the requirements of Sub-Part 3.11C of this Section shall be obtained.
 - 2. Perform field density tests in accordance with ASTM D 6938 (nuclear method), or other Engineer approved methods, as applicable.
 - a. Perimeter Access Road: For each lift of fill placed, conduct one compaction test for every 2000 square feet, but in no case less than 3 tests per lift.

- b. Pipe/Conduit Trenches: For each lift of fill placed, conduct one compaction test for every 50 linear feet of trench.
- c. Landfill Cover System: For each lift of fill placed, conduct one compaction test for every 4,000 square feet (approximately 11 tests per acre).
- 3. If in opinion of Engineer, based on testing service reports and inspection, subgrade or fills which have been placed are below specified density, provide additional compaction and testing at no additional expense to the Department.

3.13 MAINTENANCE

- A. Protection of Graded Areas:
 - Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
- B. Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.
- C. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, re-shape, and compact to required density prior to further construction.
- D. The landfill Cover Soil surface shall not be left exposed to the elements for long periods of time before placement of the subsequent lift of material (2nd lift of Cover Soil or Topsoil). Exposure to sun and wind can cause desiccation of the surface due to drying and exposure to rain can create a soft surface unable to meet compaction requirements due to moisture content. To maintain the compaction and permeability properties of the layer, minimize exposure time or make arrangement to protect the surface of the Cover Soil by laying out plastic sheeting. A rejected lift of Cover Soil due to one of these conditions will require rework prior to acceptance by the Engineer. Rework may include one of the following:
 - 1. A surface that has become desiccated will require scarification, the application of water, and remolding of the material by mechanical means.
 - 2. A surface that has become too wet will require scarifying, tilling, or disc harrowing to increase the surface area to promote drying.

3.14 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Removal from Site:

Remove waste materials, including excess and unacceptable excavated material, trash and debris, and properly dispose of it off the property in accordance with Section 02120 – Off-Site Transportation and Disposal.

END OF SECTION

SECTION 02370

EROSION AND SEDIMENTATION CONTROL

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work Included: Provide and install all materials, equipment, and labor necessary for the removal of storm runoff/surface water and to place erosion and sedimentation control measures in accordance with the applicable erosion and sediment control regulatory requirements and standards, as shown on the Construction Contract Drawings and specified herein. At the completion of the construction, provide all materials, equipment, and labor necessary for the removal, transport and disposal of temporary erosion and sediment control structures not specified to remain. Downgradient from disturbed areas, remove, transport, and dispose of sediment resulting from erosion control measures in a manner consistent with overall intent of this specification and which does not result in additional erosion.
- B. Provide and install all erosion and sediment control measures in accordance with the applicable erosion and sediment control regulatory requirements, standards and specifications and as required by field conditions during the execution of the Work. Conducting the Work in accordance with the control measures shown on the Construction Contract Drawings does not relieve the Contractor of responsibility for completing the Work in a manner that minimizes erosion when field conditions occur that require additional or different measures.
- C. Temporary erosion and sediment control measures shall be installed as the first step in construction, shall be continuously maintained, and shall not be removed until permanent surface stabilization of all disturbed areas is to the Engineer's satisfaction.
- D. Permanent controls or surface stabilization shall commence within 14 days of completion of filling and grading activities.
- E. Not all erosion and sedimentation control measures described in this specification are shown or referenced on the Construction Contract Drawings. Other measures as described and specified herein may be used to augment the proposed measures referenced on the Construction Contract Drawings based on actual field conditions encountered.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01110 Summary of Work.
- B. Section 01330 Submittal Procedures.
- C. Section 01352 Environmental Protection.
- D. Section 02300 Earthwork.

1.03 REFERENCES AND GUIDELINES

- A. New York Guidelines for Urban Erosion and Sediment Control, April 1997 by the Urban Soil Erosion and Sediment Control Committee which includes the following contributors: New York State Soil & Water Conservation Committee; Agronomy Department, Cornell University; Agricultural Engineering Department, Cornell University; New York State Department of Environmental Conservation (Department); New York State Department of Transportation; New York Chapter of Land Improvement Contractors of America; O'Brien and Gere Engineers, Inc.; and USDA-Natural Resources Conservation Service (formerly the Soil Conservation Service).
- B. New York Standards and Specifications for Erosion and Sediment Control, August 2005 by the NYS Soil and Water Conservation Committee.
- C. <u>Standards Specifications, State of New York Department of Transportation</u>, May 4, 2006 by the New York State Department of Transportation (NYSDOT).

1.04 REVIEW AND/OR INSPECTION OF SEDIMENTATION CONTROL MEASURES

All construction under this project shall be subject to review and/or inspection by the appropriate local, State, and Federal agencies responsible for ensuring the adequacy of sedimentation control measures.

1.05 SUBMITTALS

- A. The Contractor shall submit to the Engineer a Stormwater Pollution Prevention Plan (SWPPP). There will not be a state-mandated approval process, so no State fees associated with the SWPPP will be assessed.
- B. The Contractor shall include a description of their proposed means and methods to control erosion and sedimentation in the Construction Work Plan to be submitted per the requirements of Section 01110 Summary of Work.
- C. The Contractor shall submit to the Engineer the following information:
 - 1. Manufacturer's data for products
 - 2. Data for materials incorporated into the Work.

2.01 MATERIALS

A. Silt Fence:

1. Fabric – Silt fence geotextile shall meet the following properties:

Fabric Properties	Minimum Value	Test Method
Grab Tensile Strength (lbs)	90	ASTM D1682
Elongation at Failure (%)	50	ASTM D1682
Mullen Burst Strength (psi)	190	ASTM D3786
Puncture Strength (lbs)	40	ASTM D751
Slurry Flow Rate (gal/min/sf)	0.3	
Equivalent Opening Size	40-80	US Standard Sieve
Ultraviolet Stability (%)	90	ASTM G26

- 2. Fence Posts The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a cross sectional area of 3.0 square inches. Steel posts will be standard "T" or "U" section weighing not less than 1.0 pounds per linear foot.
- 3. Wire fence for reinforced silt fence (fabricated units) Wire fencing shall be a minimum 14-1/2 gauge with a maximum 6 inch mesh opening.
- 4. Prefabricated reinforced silt fence Envirofence or approved equal may be used for reinforced silt fence in lieu of reinforced fence fabricated with wire fence.
- B. Mulch: For protection of newly seeded areas where erosion control blanket is not used.
 - 1. Straw or hay free from primary noxious weed seeds and rough or woody materials and having not more than 15% moisture content. Provide hay or straw meeting the requirements of subsection 713-18 and/or 713-19 in the NYSDOT Standard Specifications.
 - 2. Wood chips used for mulch or erosion control shall not exceed 3 inches in the greatest dimension and shall meet the requirements of subsection 713-05 in the NYSDOT Standard Specifications.
 - 3. Wood fiber for use as mulch in conjunction with establishment of vegetation, shall meet the requirements of subsection 713-11 in the NYSDOT Standard Specifications.
- C. Hay Bales: Hay bales shall consist of rectangular-shaped bales of hay or straw weighing approximately 40 pounds per bale and shall be free from primary noxious weed seeds and rough or woody materials.

- D. Temporary Protective Sheeting: Temporary sheeting material shall consist of minimum 6-mil polyethylene sheeting or a suitable approved alternative and of sufficient size to minimize seams.
- E. Seed for Erosion Control:
 - 1. Temporary Control: Annual or perennial ryegrass or winter rye (cereal rye). Use winter rye if seeding in October or later.

F. Filter Berm:

- Shall consist of shredded bark, stump grindings, composted bark, or acceptable
 manufactured products. Wood and bark chips, ground construction debris or
 reprocessed wood products will not be acceptable as the organic component of
 the mix.
- 2. Erosion control mix shall contain a well-graded mixture of particle sizes and may contain rocks less than 4" in diameter. Erosion control mix must be free of refuse, physical contaminants, and material toxic to plant growth.
- G. Temporary Perimeter Dike/Swale: Provide means to separate clean stormwater runon from potential sediment laden construction stormwater runoff along the east property boundary at the location shown on the Construction Contract Drawings. Options include, but are not limited to, installation of one or more of the following measures:
 - 1. Sand bag dikes.
 - 2. Impermeable site fence: silt fence that impedes both soil and water movement with the addition of a membrane.
 - 3. Silt fence between two excavated temporary swales.
 - 4. Triangular Silt Dikes by ACF Environmental, Inc. or similar product.
- H. Erosion Control Matting: For protection of slopes greater than 10H:1V. Rolled erosion control product (RECP) shall be 100 percent biodegradable manufactured from long lasting natural fibers mechanically attached to or woven into two (2) continuous biodegradable netting structures. The RECP shall meet the following performance criteria:
 - 1. Under the installed conditions of an unvegetated, maximum 80 foot long 3:1 slope consisting of sandy loam, soil loss shall be restricted to under 0.25 inches at the bottom 10 percent of the slope.
 - 2. Functional longevity shall be a minimum of 24 months.
 - 3. North American Green C125BN or approved equal may be used.
- I. Erosion Control Matting Staples: Provide manufacturer recommended number and size to accommodate the application. In general, provide "U" shaped 11 gauge wire staples with a minimum top width of 1 inch and minimum length of 6 inches.

3.01 PERFORMANCE

- A. It is the Contractor's responsibility to implement and maintain erosion and sedimentation control measures which effectively prevent accelerated erosion and sedimentation.
- B. Earth moving activities shall be conducted in such a manner as to prevent accelerated erosion and sedimentation.
- C. Land disturbance shall be kept to a minimum. Stabilization activities shall be scheduled immediately after any disturbance
- D. Diverting Surface Water:
 - 1. Build, maintain, and operate any temporary berms, swales, channels, flumes, sumps, and other temporary diversion and protection works needed to divert surface water through or around the work area and away from Work until surface stabilization has occurred.
 - 2. Storm runoff from disturbed areas must discharge through temporary erosion control measures shown on the Construction Contract Drawings prior to discharge from the Site.

E. Erosion Control Provisions (as necessary):

- 1. Protect areas where existing banks are to be disturbed by constructing straw/hay bale or earth dikes at the top of slope to divert storm runoff from the disturbed area or at the toe of the slope to retain sediments, as conditions permit.
- 2. All discharge from any necessary pumping operations during dewatering operations shall be conveyed to an on-site storage tank. No pumped water shall be released as surface water or to the on-site stormdrain system. Refer to additional requirements in Section 02245 Construction Water Management.
- 3. Prior to removal of sediment barriers, remove retained silt or other materials at no additional cost to the Contract.
- F. Silt Fence: Install silt fence if required as a supplementary measure. The silt fence shall be installed on a level line (parallel to contours) to avoid concentrated flow areas along the fence. The area below the fence must be undisturbed or stabilized.
- G. Temporary Protective Sheeting: Soil stockpiles shall be protected with sheeting prior to forecasted significant rain events (0.5 inches or more) or as conditions require based on observed slope conditions. Overlap adjacent sheets by a minimum of 12 inches and securely anchor sheeting with sand bags and/or soil pegs, staples or stakes.
- H. Filter Berms: Sediment barriers constructed from berms of erosion control mix, compost/bark, or compost-filled filter socks maybe used at locations suitable for their use and as approved by the Engineer.
- I. Mulch: Conduct mulching immediately following seeding. For the mulching type used, apply mulch materials at the rate specified in Table 3.7 and anchor as specified in Table 3.8 in the New York Standards and Specifications for Erosion and Sediment Control.
- J. Seed for Erosion Control:

1. Temporary Seeding: Minimum application rate of ryegrass (annual or perennial) shall be 30 pounds per acre and minimum application rate for winter rye shall be 100 pounds per acre.

3.02 MAINTENANCE

- A. The Contractor shall be held responsible for the implementation and maintenance of all erosion control measures on the Site.
- B. Throughout construction and until the Site has been stabilized upon completion of the Work, all erosion and sediment control measures will require periodic inspection and maintenance to ensure that such measures are providing effective service. At a minimum, the following inspection and maintenance shall be required during execution of this project:
 - 1. All erosion and sediment control will be inspected at least once a week and after all rain events. Conduct required repairs to installed measures immediately to ensure continued effective operation.
 - 2. Remove sediment that has accumulated in the filter bag of the catchbasin inlet filters when it has reached the capacity limit recommended by the manufacturer.
 - 3. Remove sediment that has accumulated behind the sedimentation fencing when it has reached a depth of approximately 0.5 feet deep or removed as needed when bulges develop in the fence. The sedimentation fence shall be repaired as necessary to maintain the barrier as intended.
 - 4. Sediment removed from control measures shall be collected and segregated as waste to be characterized, and properly disposed of off-site. No sediment shall be disposed of on-site.
 - 5. All seeded areas will be protected from traffic and shall receive appropriate watering during germination and growth establishment. Areas that do not establish a vigorous, dense vegetative cover (at least 80% surface coverage) shall be reseeded and mulched.
- C. Maintain the integrity of all erosion control measures throughout construction period.

3.03 SPECIAL CONDITIONS

- A. Prohibited Construction Practices Prohibited construction practices include but shall not be limited to the following:
 - 1. Dumping of spoil material into any stream corridor, any wetlands, any surface waters, stormdrain system, or at any other unspecified locations.
 - 2. Indiscriminate, arbitrary or capricious operation of equipment in any stream corridors, any wetlands or any surface waters.
 - 3. Pumping of silt-laden water from trenches or other excavations into any surface waters, any stream corridors, any wetlands, or any stormdrain system.

- 4. Disposal of trees, brush and other debris in any stream corridors, any wetlands, any surface water or at unspecified locations.
- 5. Permanent or unspecified alteration of the flow line of any stream.
- 6. Open burning of construction debris.
- B. Winter Stabilization Beyond October 15, (when temporary seeding is not likely to germinate) mulch shall be used as a temporary soil stabilization measure.
 - 1. Mulch shall be applied to exposed soil surfaces at double the mulching rates indicated in Sub-Part 3.01I. Note that wood fiber may not be used as mulch during winter conditions.
 - 2. Mulch shall be anchored using one of the methods prescribed in Sub-Part 3.01I.

3.04 ADJUSTMENT OF PRACTICES

- A. If the planned measures do not result in effective control of erosion and sediment runoff to the satisfaction of the Engineer or regulatory agencies having jurisdiction over the project, the Contractor shall immediately adjust their program and/or institute additional measures so as to eliminate excessive erosion and sediment runoff.
- B. If the Contractor fails or refuses to comply promptly, the Department may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor.

3.05 REMOVAL OF TEMPORARY WORKS

A. Remove or level and grade to the extent required to present a sightly appearance and to prevent any obstruction of the flow of water or any other interference with the operation of or access to the permanent works.

END OF SECTION

SECTION 02522

GROUNDWATER MONITORING WELLS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. The Contractor shall provide all necessary personnel, equipment, and materials required to perform drilling, well installation, and well development services associated with the remedial action at the South Hill Dump Site in Cortlandville, New York for the purpose of:
 - 1. Completing one (1) overburden borehole and installing one (1) groundwater monitoring wells to an approximate depth of 15 feet below ground surface.
 - 2. Completing one (1) bedrock borehole and installing one (1) bedrock groundwater monitoring well to an approximate depth of 26 feet below ground surface.
- B. The Contractor shall obtain approval for the borehole and well locations from the Engineer prior to drilling.
- C. The wells should be installed in accordance with American Society for Testing and Materials (ASTM), the Unites States Environmental Protection Agency (USEPA), The New York State Department of Environmental Conservation (the Department), and generally accepted industry standards and requirements for well installation.

1.02 RELATED WORK SPECIOFIED ELSEWHERE

- A. Section 01330 Submittal Procedures.
- B. Section 02110 Waste Removal, Handling, and Storage.
- C. Section 02120 Off-Site Transportation and Disposal.
- D. Section 02245 Construction Water Management

1.03 REFERENCES

- A. American Petroleum Institute (API)
 - 1. API Specification 13A (2008) Specification for Drilling-Fluid Materials, Seventeenth Edition.
- B. American National Standards Institute (ANSI)
 - 1. ANSI/ASME B 1.20.1-1983 (R2006) Pipe Threads, General Purpose (Inch)

- C. American Society for Testing and Materials (ASTM):
 - 1. ASTM A 312 / A 312M (2009) Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes.
 - 2. ASTM A 403 / A 403M (2010a). Standard Specification for Wrought Austenitic Stainless Steel Piping Fittings.
 - 3. ASTM A 778-01 (2009e1) Standard Specification for Welded, Unannealed Austenitic Stainless Steel Tubular Products.
 - 4. ASTM D 422 (1998) Standard Test Method for Particle-Size Analysis of Soils.
 - 5. ASTM D 1785 (2006) Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedule 40, 80, and 120.

D. American Water Works Association

1. AWWA C206-11, AWWA Standard for Field Welding of Steel Water Pipe.

1.04 SUBMITTALS

A. Submit the following in accordance with Section 01330 – Submittal Procedures:

1. Statements:

- a. Temporary borehole drilling, groundwater monitoring well borehole drilling, and well installation methodology;
- b. Water treatment plan and justification;
- c. The type and size of drilling and sampling equipment to be used at each location:
- d. Recommended material for well housing and justification;
- e. Number of personnel to be deployed during the work and the proposed schedule/logistics for completing the work.

B. Field Test Reports:

- 1. Submit the following field test reports:
 - a. Written assurance each well meets the requirements specified herein for materials, depths, plumbness and alignment.
 - b. Drilling records including casings, cement-bentonite grout, well screens, penetration, and filter pack.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver screen, casing, and all materials in an undamaged condition. Materials must be approved by the Engineer prior to use. Store materials off the ground to provide protection

against oxidation caused by ground contact. Replace defective or damaged materials with new materials.

1.06 SITE MAINTENANCE

- A. The site will be maintained in a neat and orderly condition, free from trash and waste construction materials at all times. Unattended construction materials, equipment, and trash shall be left in a manner such that they do not constitute fire hazards, or become or cause nuisance or danger due to forces of nature, such as rain or wind. All vehicles shall be loaded in a manner which shall prevent spillage, dripping, or loss of materials and debris.
- B. Provide, maintain, and remove upon completion of work all temporary rigging, scaffolding, hoisting, equipment, barricades, ladders, fences, staging, treatment, containment, decontamination, and all other temporary facilities. All temporary facilities shall conform to the requirements of the Engineer, and Federal, State, and local authorities.

1.07 NUISANCE WATER

A. Nuisance water, such as rain or snow fall or surface water run-off may be encountered within the work site during the period of performance. Precautions shall be taken to assure that potentially contaminated soil and surface waters do not enter the boreholes or migrate away from the work area. Work shall be protected from damage by such waters, and measures to prevent delays in progress of work caused by such water shall be undertaken at all times.

PART 2 – PRODUCTS

2.01 EQUIPMENT, MATERIAL, TOOLS, CONTAINERS

- A. Equipment, materials and tools shall conform to the respective specifications and other requirements as specified herein.
 - 1. Overburden Monitoring Well
 - a. Drill Rig and Tools: to be used for completion of one, eight-inch borehole for installation of the overburden monitoring well referenced in Sub-Part 1.01.A.1shall be capable of reaching depths of at least 10 feet. Drill rig and tools that are not adequate, in the opinion of the Engineer, will not be permitted. The drill rig and chosen methods shall be capable of creating sufficient annular space to install the monitoring well as shown on the Construction Contract Drawings and as directed by the Engineer.

2. Bedrock Monitoring Well

a. Drill Rig and Tools: to be used for completion of the borehole for installation of monitoring well referenced in Sub-Part 1.01.A.1 shall be capable of reaching depths of at least 30 feet. Based on previous explorations, bedrock is anticipated to be encountered at approximately 13 feet below ground surface. Drill rig and tools that are not adequate, in the opinion of the Engineer, will not be permitted. The drill rig and chosen methods shall be capable of installing the bedrock well as shown on the Construction Contract Drawings and as directed by the Engineer.

B. Well Materials:

1. Overburden Monitoring Well:

- a. Monitoring well riser and well screen shall be flush-threaded 2-inch diameter. Schedule 40 PVC.
- b. Well screens shall be machine-slotted 0.010-inch screen openings and shall be assembled in five-foot sections.

2. Bedrock Monitoring Well:

- a. The bedrock monitoring well will be completed as an open-bedrock hole well.
- b. The bedrock well will be grouted approximately 4 feet into the bedrock using 4-inch steel casing, or to approximately 16 feet below ground surface.
- c. The bedrock boring will then be advanced to completion, from approximately 16 feet below ground surface to 26 feet below ground surface, using a three-inch drill bit.

C. Filter Pack and Grout:

1. Overburden Monitoring Well:

- a. Filter pack shall be placed around the well screens, extending a minimum of two feet above the top of the screen slots or to a depth specified by the Engineer. The Contractor shall supply the particle size and uniformity specifications of the filter pack prior to mobilization and the filter pack shall be reviewed and approved by the Engineer prior to placement.
- b. Bentonite chips or pellets shall fill the annular space above the filter pack for a 2-foot depth. The bentonite shall be hydrated if placed above the water table.
- c. Cement/bentonite grout shall fill the annular space above the bentonite chip/pellet layer to the bottom of the crushed stone base of the stick-up well cover. Provide neat cement grout, Type I or II Portland cement conforming to ASTM C 150, and water. The mixed grout shall contain no more than 7 gallons of water per bag (1.0 cubic foot or 94 pounds) of cement. Add commercially available bentonite designed for well sealing. Mixture to be

20 parts cement and 1 part bentonite. The method of grout placement shall be reviewed by the Engineer. If grout is placed below the water table it shall be tremied to the desired depth.

2. Bedrock Monitoring Well:

a. Cement/bentonite grout shall extend from the bottom of the four-inch casing to the bottom of the crushed stone base of the stick-up well cover. Provide neat cement grout, Type I or II Portland cement conforming to ASTM C 150, and water. The mixed grout shall contain no more than 7 gallons of water per bag (1.0 cubic foot or 94 pounds) of cement. Add commercially available bentonite designed for well casing sealing. Mixture to be 20 parts cement and 1 part bentonite. The method of grout placement shall be reviewed by the Engineer. If grout is placed below the water table it shall be tremied to the desired depth.

D. Protective Well Covers:

1. Bedrock Monitoring Wells:

- a. Provide 4 inch diameter protective steel casing set 16 feet below grade and 3 feet above grade.
- b. Set protective casing in place with a concrete seal supported with stone as shown on the Construction Contract Drawings.
- c. Provide a 4-inch diameter lockable steel well cover.

2. Overburden Monitoring Wells:

- a. Provide a removable, water-tight expansion well cap to seal the top of each monitoring well riser.
- b. Provide protective steel casing set a minimum of 18-inches below grade and 3 feet above grade.
- c. Set protective casing in-place with a concrete seal. The space between the protective casing and the well riser shall be partially filled with stone as shown on the Construction Contract Drawings.
- d. Provide a 12-inch diameter lockable steel well cover.

E. Identification Tags:

1. Monitoring Wells:

- a. Provide durable weather-resistant well identification tags with legible well identification numbers on each new well (2) and the existing seven (7) wells to remain. The locations and identifications of each well are shown on Construction Contract Drawing C-101.
- b. Attach tags at least 24 inches above ground level using one of the following methods:

- i. Strap the tag to the well casing using stainless steel bands or large hose clamps designed for exterior applications.
- ii. Strap the tag to the well casing using ultra violet resistant nylon straps designed for exterior applications.
- iii. Rivet or bolt the tag to the well casing using stainless steel rivets or bolts.

F. Locks and Keys:

1. Monitoring Wells:

- a. Provide durable weather-resistant exterior grade padlocks for each (2 total) new well cover. Style of padlock shall be inset flush with the top of the cover.
- b. Remove any existing padlocks from the well covers of the existing seven (7) wells to remain and replace with new padlocks matching those of the new wells.
- c. All well padlocks shall be keyed alike.
- d. A minimum of two (2) sets of keys shall be provided to the Department.

2.02 QUALITY CONTROL

A. Well materials shall be new and undamaged and where possible factory cleaned and wrapped. Materials which are damaged or determined to be not in accordance with desired specifications will be rejected. Equipment and materials will be decontaminated and stored in a fashion that will adequately protect them from contamination or degradation.

PART 3 - EXECUTION

3.01 BORING LOGS

- A. During the progress of each boring, the Contractor shall keep a continuous and accurate log of drilling technique, sample blow counts, downhole equipment, and materials used.
- B. Data to be provided:
 - 1. Names of driller and inspector.
 - 2. Dates and times of beginning and completion of work.
 - 3. Identifying number and location of boring.
 - 4. Diameter and description of drilling equipment.
 - 5. Total length and size of drilling equipment and/or casing.
 - 6. Length of drilling equipment or casing extending below ground surface at the completion of the boring.
 - 7. Depth to top of each different material penetrated, as noted by drilling performance or observation of drill cuttings.

- 8. Depth to water surface in borehole at completion and at end of each major work stoppage.
- 9. Loss or gain of drilling water or mud if used during the advancement of the borings to install the monitoring wells.
- 10. Any sudden dropping of drill rods or other abnormal behavior.

3.02 CONSTRUCTION

- A. Overburden Monitoring Well Boreholes: The boreholes completed for installation of the overburden monitoring wells shall be completed using hollow-stem auger or other method to be approved by the Engineer that will advance the borings to the required depths in a timely manner, limit production of waste soil and water, and allow for appropriate construction of the well and surrounding material.
- B. Bedrock Monitoring Well Boreholes: The boreholes completed for installation of the bedrock monitoring wells shall be completed using a combination of hollow-stem augers for the overburden material and tri-cone bit for the bedrock material, or other method to be approved by the Engineer that will advance the borings to the required depths in a timely manner, limit production of waste soil and water, and allow for appropriate construction of the well and surrounding material.

3.03 PERMITS, REGULATIONS, AND PUBLIC RELATIONS

- A. Permits and licenses of a temporary nature necessary for the execution of the Contractor's work shall be secured and paid for by the Contractor. The Contractor shall give all notices and comply with all laws, ordinances, rules, and public regulations bearing on the conduct of the work as described in the scope of work specified.
- B. If the Contractor performs any Work without giving notice to the Engineer and does not receive written notification from the Engineer to proceed with Work, which is later determined to be contrary to any laws, ordinances, or regulations, the Contractor proceeds at their own risk, and shall bear all penalties and costs arising from such actions.
- C. The Contractor shall be solely responsible for compliance with laws, ordinances, and regulations during the course of Work, including those relating to safety to personnel and property and the handling of wastes and/or hazardous material. No off-site shipment of wastes will be allowed without authorization from the Engineer. Copies of all permits, manifests, and other documentation shall be forwarded in a timely manner to the Engineer.

3.04 PROTECTION OF WORK, PUBLIC AND PROPERTY

- A. The means, methods, procedures, and techniques to be used by the Contractor are the responsibility of the Contractor, and shall be designed to meet the intent of the specifications.
- B. The Contractor shall continuously protect its work from damage and protect adjacent property as provided by law. The Contractor shall maintain lights and other safety devices as required. The Contractor shall promptly repair all damages caused by its operations. When using internal combustion equipment, the Contractor shall have available at the work site emergency fire extinguishers or other approved fire fighting apparatus at all times.

- C. During its operations, the Contractor may occupy only those portions of the public right-ofway for which the required permits have been obtained by the Contractor. If the Contractor desires to use additional areas outside of those required for the borings, it shall arrange for such areas at its own coordination and expense.
- D. Fill all drill holes, ruts, low spots, and areas of disturbed grade created as a result of the work. Grade disturbed areas smooth, seed, and mulch. Any property which is damaged as the result of the Contractor's operations shall be repaired at the Contractor's expense to the satisfaction of the Engineer. Remove and properly dispose of all unused or wasted construction materials and equipment.
- E. All drilling casings shall be withdrawn from the drill holes unless directed to be left in place by the Engineer.
- F. The Contractor shall secure the work site and any other potential hazards over night.

3.05 DISPOSAL OF CUTTINGS AND WELL DEVELOPMENT WATER

- A. Temporarily store soil/bedrock boring cuttings in a container or temporary stockpile until transfer for on-site disposal within the new solid waste boundary of the existing landfill.
- B. Collect, handle, and store all well development water and decontamination fluids in accordance to Section 02245 Construction Water Management.

3.06 DECONTAMINATION

- A. Clean and decontaminate all equipment at the designated decontamination pad. All water will be containerized and sampled for contamination by the Contractor as specified in Section 02120 Off-Site Transportation and Disposal, and as described above.
- B. Decontaminate all rigs and equipment upon arrival at site, between each borehole, and upon completion of work. All down-hole sampling equipment shall be decontaminated between sample locations using a steam cleaner or high pressure wash, clean water, laboratory-grade detergent, or alconox or similar means. All drilling equipment shall be rinsed thoroughly with tap water. All sampling equipment shall be rinsed with de-ionized water.

END OF SECTION

SECTION 02526

WELL ABANDONMENT

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This specification establishes the requirements for monitoring well abandonment. Wells to be abandoned must be fully sealed in a manner appropriate for the geologic conditions to prevent contaminant migration through the borehole.
- B. Existing wells within the limits of work to be abandoned are as follows:
 - 1. MW-3S, 8-inch diameter borehole, 10 feet deep; and
 - 2. MW-3B, 3-inch diameter borehole, 26 feet deep.
- C. Additional borehole and well information can be found in the Limited Site Data document.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01330 Submittal Procedures
- B. Section 02110 Waste Removal, Handling, and Storage
- C. Section 02120 Off-Site Transportation and Disposal

1.03 REFERENCES AND GUIDELINES

- A. New York State Register and Official Compilation of Codes, Rules and Regulations (NYCRR), Chapter IV Quality Services, Sub-Part 360-2 .11, Hydrologic Report (4 NYCRR Sub-Part 360-2.11).
- B. New York State Department of Environmental Conservation Commissioner Policy (CP)–43: Groundwater Monitoring Well Decommissioning Policy, dated November 3, 2009.

1.04 SUBMITTALS

- A. Submit the following in accordance with Section 01330 Submittal Procedures.
 - 1. Well Abandonment Completion Form:
 - a. Upon completion of abandonment of each well a Well Abandonment Completion Form must be completed and submitted. The Abandonment

Form shall detail the material types, quantities, and methods used and any components of the well removed.

PART 2 – PRODUCTS

2.01 WELL PLUGGING MATERIALS

- A. Type 1 cement/bentonite grout:
 - 1. Type 1 cement/bentonite grout with 4% (by weight) powdered bentonite may be used in the riser pipe interval of screen and riser pipe wells.

B. Microfine cement grout:

 Microfine cement grout will be used for screened sections of wells and may be used for riser sections. The microfine cement should be similar or equal to MC-500 microfine cement distributed by Geochemical Corporation, Ridgewood, New Jersey.

PART 3 - EXECUTION

3.01 WELL PLUGGING AND ABANDONMENT REQUIREMENTS

- A. Monitoring wells shall be abandoned according to the requirements of the New York State Department of Environmental Conservation (the Department) and these Specifications.
- B. The Subcontractor shall maintain a well abandonment record. Groundwater levels shall be measured in all wells prior to abandonment. These water levels shall be included in the well abandonment records.
- C. Overbore or remove the casing to the greatest extent possible. All casing and well installations within five feet of the proposed final grade must be removed. Perforate casing left in place.
- D. Seal by pressure injection with Type 1 cement/bentonite grout (riser sections only) or microfine cement grout (screened or riser sections) using a tremie pipe or other method acceptable to the Department. Grout must extend the entire length of the boring, from the bottom of the well to five feet below the proposed final grade. The screened interval of the borehole must be sealed separately and tested to ensure its adequacy before sealing the remainder of the borehole. Where the surrounding geologic deposits are highly permeable, alternate methods of sealing may be required to prevent the migration of the grout into the surrounding geologic formation. Grout shall continue to be added to fill gaps created by settlement until the plugging material sets.

- E. Backfill and compact the upper five feet with subgrade fill as specified in Section 02300 Earthwork.
- F Restore the site to a safe condition. The site must be inspected periodically after sealing for settlement or other conditions which require remediation.
- G. Locations of abandoned wells shall be surveyed as a requirement of the Record Drawing submission.

3.01 WASTE DISPOSAL

- A. Waste materials derived from well abandonment may include removed casing, removed riser pipe and excess grout.
- B. Waste materials may be disposed of within the new solid waste boundary of the existing landfill provided waste consolidation and grading activities are ongoing.
- C. If waste consolidation and grading activities on-site are complete, the Contractor shall dispose of well abandonment derived waste materials off-site in accordance with Section 02120 Off-Site Transportation and Disposal.

END OF SECTION

SECTION 02634

SITE PIPING

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work Included:

- 1. Furnish and install a culvert of the type and size specified herein and in the location shown on the Construction Contract Drawings.
- 2. Furnish and install gas vent piping including the collection and vent pipe of the type and size specified herein and in the locations shown on the Construction Contract Drawings.
- 3. Furnish and install underdrain piping of the type and size specified herein and in the locations shown on the Construction Contract Drawings.
- 4. Furnish and install sediment/detention basin piping including the riser and outlet pipe of the type and size specified herein and in the locations shown on the Construction Contract Drawings.
- B. The extent of the Work is generally shown on the Construction Contract Drawings and shall be extended to accommodate changes which become necessary as a result of encountering unforeseen or changed conditions in the field.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01330 Submittal Procedures
- B. Section 02300 Earthwork

1.03 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

- A. American Association of State Highway and Transportation Officials (AASHTO)
 - 1. AASHTO M252 (2002) Corrugated Polyethylene Drainage Tubing
 - 2. AASHTO M294 (2002) Standard Specification for Corrugated Polyethylene Pipe, 300 to 1200 mm (12 to 48 in.) Diameter

- 3. AASHTO MP7 (2002) Standard Specification for Corrugated Polyethylene Pipe, 1350 to 1500 mm (54 to 60 in.) Diameter
- B. American Society for Testing and Materials (ASTM)
 - 1. ASTM C 150 (2002) Standard Specification for Portland Cement
 - 2. ASTM C 443 (2002) Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets
 - 3. ASTM D 1056 (2000) Standard Practice for Flexible Cellular Materials Sponge or Expanded Rubber
 - 4. ASTM D 2321 (2000) Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity Flow Applications
 - 5. ASTM D 2513 (2001a) Thermoplastic Gas Pressure Pipe, Tubing, and Fittings
 - 6. ASTM D 3212 (1996) Standard Specification for Joints for Drain and Sewer Plastic Pipe using Flexible Elastomeric Joints
 - 7. ASTM D 3261 (1997) Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing
 - 8. ASTM D 3350 (2002) Standard Specification for Polyethylene Plastic Pipe and Fittings Materials
 - 9. ASTM F 477 (2002) Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
 - 10. ASTM F 667 (1997) Standard Specification for Large Diameter Corrugated Polyethylene Pipe and Fittings

1.04 SUBMITTALS

Submit the following in accordance with Section 01330 – Submittal Procedures.

A. Product Data: Submit pipe manufacturer's specifications and product data certifying conformance with these specifications for the corrugated polyethylene piping, including fittings and jointing materials.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Delivery and Storage: When delivered to the Site and prior to unloading, inspect materials for damage. Any defective or improper materials shall be marked and shall not be unloaded. Minimize the handling of pipe materials to accommodate storage. Store plastic piping and jointing materials and rubber gaskets under cover out of direct sunlight. Do not store materials directly on the ground. Keep inside of pipes and fittings free of dirt and debris.
- B. Handling: Handle pipe, fittings, and other accessories in a manner to ensure delivery to the trench/specified location in sound undamaged condition.

2.01 PIPE MATERIALS

A. Pipe and Fittings:

 Stormdrain pipe shall be corrugated high density polyethylene pipe (HDPE) with smooth interior (dual wall) conforming to AASHTO M252, AASHTO M294, or AASHTO MP7 Type S (smooth interior). Pipe and fitting material shall be highdensity polyethylene meeting ASTM D 3350 minimum cell classification of 335400C.

B. Joints and Jointing Materials:

Jointing shall be conducted using split couplers, snap couplers, or bell and spigot
with elastomeric gaskets in accordance with ASTM D 3212 and ASTM F 477 or
ASTM D 1056. Joints shall be silt-tight. Only couplers, joints and gaskets
provided by or recommended by the pipe Manufacturer for the pipe shall be used.

C. Fittings and Accessories:

- 1. Fitting shall be of the same strength or stronger and same size as the stormdrain pipe.
- 2. Manufactured and furnished by pipe supplier or equivalent.
- 3. 6x12 inch reducing coupling to transition from roof drain downspout to stormdrain piping.
- 4. 12-inch wyes and bends as required to install the stormdrain configuration as shown on the Construction Contract Drawings.
- 5. 6 inch wyes and bend to construct the cleanout depicted on the Construction Contract Drawings.
- 6. Tie-In: Provide restrained mechanical coupling of suitable type to connect existing storm drain pipe from existing building to new stormdrain pipe. Coupling shall be compatible with pipe materials and sizes.

D. Marking on each pipe length:

- 1. Class of pipe.
- 2. Date of manufacture.
- Name of manufacturer.

2.02. CONDITIONS FOR USE

- A. Bedding: pipe bedding material shall be Crushed Stone as described in Section 02300 Earthwork. Crushed Stone shall be extended a minimum of 6 inches below the outside bottom of pipe and above the outside crown of pipe.
- B. At locations where stormdrain pipe crosses sheet piling to remain post-construction, sheet piling shall be notched out to a minimum distance of 18 inches beyond the outside diameter of the pipe in all directions.

PART 3 – EXECUTION

3.01 INSTALLATION OF PIPELINES AND APPURTENANT CONSTRUCTION

- A. Earthwork:
 - Perform earthwork operations in accordance with Section 02300 Earthwork.
- B. Installation Stormdrain Pipe:
 - Install pipe generally in accordance with ASTM D 2321, except that the minimum cover in traffic areas shall be 20 inches.
 - 1. Inspect each pipe and fitting before and after installation; remove those found defective from Site and replace with new.
 - 2. Provide proper facilities for lowering sections of pipe into trenches.
 - 3. Lay pipe with the bell or groove end in the upgrade direction.
 - 4. Adjust spigots in bells to produce a uniform space. Blocking or wedging between bells and spigots will not be permitted. Replace any segment of pipe or fitting that does not allow sufficient space for proper installation of joint material.
 - 5. Firmly support the pipe and fittings on bedding material as shown on the Construction Contract Drawings and as specified in the appropriate Sections of these Specifications.
 - 6. Do not permanently support the pipe or fittings on saddles, blocking stones, or any material which does not provide firm and uniform bearing along the outside length of the pipe.
 - 7. Thoroughly compact the material under the pipe to obtain a substantial unyielding bed, hand-shaped to fully support the pipe.
 - 8. Excavate suitable holes for the joints so that only the barrel of the pipe receives bearing pressure from the supporting material after placement.
 - 9. Set the pipe true to line and grade by laser beam alignment methods or alternate approved method by the Engineer.
 - 10. Do not drive the pipe down to grade by striking it with a shovel handle, timber, rammer, or any other unyielding object.
 - 11. When each pipe length has been properly set, place and compact enough of the bedding material between the pipe and the sides of the trench to hold the pipe in correct alignment.

- 12. Hand place stone around the haunch of the installed pipe to provide adequate support of the pipe.
- 13. After filling the sides of the trench, place and lightly tamp bedding material to complete the bedding as shown on the Construction Contract Drawings.
- 14. Take all necessary precautions to prevent flotation of the pipe in the trench.
- 15. At the end of each work day, close open ends of pipe temporarily with wood blocks or bulkheads.
- 16. Do not use the pipelines as conductors for trench drainage during construction.
- 17. Cut or furnish short lengths of pipe at manholes or appurtenances so that the length to the first joint for all pipes entering and leaving manholes measures not more than 2 feet from the outside face of the manhole.

C. Jointing:

- 1. Connect pipe in accordance with the latest manufacturer's instructions and recommendations.
- 2. Clear each pipe length, coupling, and fitting of all debris and dirt before installing.
- 3. Provide and use coupling pullers for jointing the pipe.
- 4. Provide gasket feeler gauges for use by the pipe layer for checking the position of the rubber gaskets in the completed joints.
- 5. Shove home each length of pipe against the pipe previously laid and hold securely in position. Do not pull or cramp joints.
- 6. Make all pipe joints as watertight as possible with no visible leakage and no sand, silt, clay, or oil of any description entering the pipeline at the joints.
- 7. Immediately after making a joint, fill the holes for the joints with bedding material, and compact.

D. Pipe Cutting:

- 1. Cut in accordance with manufacturer's recommendations.
- 2. Cut the pipe with a hand saw, metal-inserted abrasive wheel (except asbestoscement pipe), or pipe cutter with blades (not rollers).
- 3. Examine all cut ends for possible cracks caused by cutting.

3.02 FIELD QUALITY CONTROL

A. Field Tests and Inspections:

Prior to backfilling, pipe installation shall be inspected for proper vertical and horizontal alignment. Joints shall be inspected for proper installation.

- B. Pipeline Testing:
 - 1. Visual Inspection:

Where straight runs are indicated or required, check pipeline for gross deficiencies by holding a light in a manhole; It shall show a practically full circle of light through the pipeline when viewed from the adjoining end of line.

END OF SECTION

SECTION 02921

SEEDING AND SOIL SUPPLEMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. For restored areas to be vegetated as indicated on the Construction Contract Drawings, provide seed as specified herein.
- B. Furnish and place topsoil, lime, fertilizer, seed, and mulch or erosion control matting in the areas indicated, and maintain new seeding through the contract maintenance period.
- C. Disturbed areas outside the limit of grading but inside the limit of work may be seeded and mulched without the addition of Topsoil.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01330 Submittal Procedures
- B. Section 02300 Earthwork
- C. Section 02370 Erosion and Sedimentation Control

1.03 REFERENCES AND GUIDELINES

- A. New York Standards and Specifications for Erosion and Sediment Control (NYS SESC), August 2005 by the NYS Soil and Water Conservation Committee.
- B. <u>Standards Specifications, State of New York Department of Transportation (NYSDOT SS)</u>, May 4, 2006 by the New York State Department of Transportation (NYSDOT).

1.04 SUBMITTALS

Submit the following in accordance with Section 01330 – Submittal Procedures.

- A. Grass Seed Vendor's Certificate:
 - Subcontractor shall submit the seed vendor's certified statement for the grass seed mixture required, showing common name, percentage of seed mix by weight, percentages of purity and germination, year of production, date of packaging, and location of packaging.
- B. Fertilizer:
 - Subcontractor shall submit the fertilizer manufacturer's product data showing chemical analysis and percent composition.
- C. Hydraulic Seeding Method:
 - If the Hydraulic Seeding Method is used, submit a certified statement as to the number of pounds of materials to be used per 100 gallons of water, and specify the number of square feet of seeding that can be covered with the quantity of solution in the hydroseeder.

1.05 DEFINITIONS

A. Limit of Work:

Seeding shall be performed on all disturbed areas within the limit of work as delineated on the Construction Contract Drawings.

B. Limit of Grading:

Topsoiling, seeding, and mulching shall be performed within the outermost limit of grading as delineated on the Construction Contract Drawings.

C. The exception to these requirements is a for those areas that require alternate stabilization with erosion control matting, or riprap as shown on the Construction Contract Drawings or described in Section 02370 - Erosion and Sedimentation Control.

PART 2 – PRODUCTS

2.01 MATERIALS

A. General:

Obtain and retain as part of the project records, certifications, and/or labels of materials supplied.

B. Topsoil:

Refer to Section 02300 - Earthwork.

C. Fertilizer:

Supply fertilizer meeting the recommendation of the testing laboratory nutrient analysis for the Topsoil. At a minimum provide a standard commercial 5-10-10 grade containing at least 10 percent available nitrogen, 10 percent readily available phosphoric acid and 10 percent total available potash in conformity with the Standards of the Association of Official Agricultural Chemists. Supply in unopened bags with the weight, contents and guaranteed analysis shown thereon or on a securely attached tag.

- D. Lime:
 - 1. Apply ground limestone (equivalent to 50% calcium plus magnesium oxide) at a rate recommended by the testing laboratory based on the results of their nutrient analysis of the Topsoil. At a minimum apply 3 tons per acre (135 pounds. per 1,000 square feet).
 - 2. Provide ground agricultural limestone (fine ground dolomite) conforming to the requirements of NYSDOT SS M.18.05.1. The gradation shall consist of 40 but not more than 60 percent finer than the No. 60 sieve and 50 percent finer than the No. 100 sieve.
- E. Seed for Permanent Vegetation:

Shall meet the following minimum requirements:

- 1. The grass seed mixture shall include no "primary noxious weed seeds."
- 2. Furnish in fully-labeled, standard sealed containers.

- 3. Percentage and germination of each seed type in the mixture, purity, and weed seed content of the mixture shall be clearly stated on the label.
- 4. The weight of pure live seed (PLS) is computed by the labeled purity percent times the labeled germination percent times the weight. To illustrate the method of computing to PLS from the tag basis, the following example is given: Required: 20 pounds PLS of a particular variety—stock available is 99.41% pure and 92% germination—20 divided by the product of 0.9941 and 0.92 equals 21.8 pounds on the tag basis to furnish 20 pounds of PLS.
- 5. Subject to the testing provisions of the Association of Official Seed Analysis, with the month and year of test clearly stated on the label.
- 6. Seed which has become wet, moldy, or otherwise damaged will not be acceptable.
- 7. All seed shall be certified as to mixture, germination, purity, and live seed as follows:

Percent germination > 80%

Pure Live Seed (PLS) > 85%

Percent Purity > 85%

Weed Seed < 1%

All seed shall be from the current year's crop unless recent tests by an approved testing agency demonstrate that older seed meets the above requirements.

8. Use the seed mix specified as Mix #6 of Table 3.1, "Permanent Critical Area Planting Mixture Recommendations of the NYS SESC and reiterated in Table 02921-1:

Table 020	21	1.	Permanent	Caal	N /
Table 029	Z I -	1.	Permanent	seeu	IVIIX

Species/ Variety	Rate in lbs per acre
Creeping red fescue / Ensylva, Pennlawn,	20
Boreal	
Tall Fescue/ KY 31, Rebel	20
Perennial Ryegrass/ Pennfine, Linn	5
Birdsfoot trefoil/ Empire. Pardee	10

- 9. Other suitable seed mixtures may be used if approved by the Engineer.
- 10. For temporary seeding requirements see Section 02370 Erosion and Sedimentation Control.
- F. Mulch:

Refer to Section 02370 - Erosion and Sedimentation Control for mulching requirements.

G. Erosion Control Matting:

Refer to Section 02370 - Erosion and Sedimentation Control for erosion control matting requirements.

PART 3 – EXECUTION

3.01 PREPARATION

A. All Areas to be Seeded:

- 1. Shall be worked as necessary to provide a reasonably firm but friable seedbed.
- 2. Shall meet the specified grades and are free of growth and debris.
- 3. Take care to prevent the formation of low places and pockets where water will stand.

B. Depth of Tillage:

- 1. Two (2) inches or as directed by the Engineer.
- 2. On slopes steeper than 3:1, reduce depth of tillage as directed.
- 3. Where ryegrass has been planted for temporary erosion control and has not been eliminated prior to the completion of the Work, disk at least 4 inches deep and seed to permanent grasses.

3.02 APPLICATION

A. Topsoil:

Topsoil shall be placed using earth moving equipment. The soil shall be spread and tracked to a uniform depth as indicated on the Construction Contract Drawings. The soil surface shall be left free of ruts or channels. Remove all large stiff clods, lumps, brush, roots, stumps, litter, and other foreign material and stones over 3-inch in size. See Section 02300 - Earthwork for additional requirements.

B. Fertilizer and Lime:

- 1. Apply by means of a mechanical spreader or other acceptable method which is capable of maintaining a uniform rate of application.
- 2. Conduct when the soil is in a moist condition and at least 24 hours before sowing the seed.
- 3. Fertilizer shall be applied at the rate based on the results of the nutrient analysis specified in Section 02300 Earthwork. If the default 5-10-10 fertilizer is utilized, apply at a rate of 600 pounds per 1 acre.

C. Seeding:

- 1. Perform erosion control items of work such as seeding and mulching as soon as practical for areas of suspended work or areas of completed work.
- 2. When seeding is required on areas of the project where work is not complete but will be suspended for an extended period, use the appropriate temporary seed mix specified in Section 02370 Erosion and Sedimentation Control.
- 3. When seeding is required on areas of the project where grading is complete, use the specified permanent seed mixture.
- 4. Apply permanent seed mix between April 1 to May 31 (Spring Seeding) or August 15 to October 15 (Fall Seeding) at a rate of 55 pounds per acre (1.45 pounds per 1,000 square feet).
- 5. Planting between October 15 and April 1 shall be considered Winter Seeding and shall be subject to the additional requirements described in Sub-part 3.04.
- 6. Special care must be taken if seeding must occur during the generally hot, dry period from June to August.

7. Seeding Restrictions:

Do not seed during windy weather or when the ground is excessively wet, or otherwise untillable.

D. Mulch:

- 1. Undertake immediately after each area has been properly prepared and seeded.
- 2. Apply the selected mulch type at the rates noted in Table 3.7 of the NYS SESC on all seeded areas not otherwise protected with erosion control matting.
- 3. Blowing chopped mulch shall be permitted provided mulch anchoring is performed.
- 4. Hay or straw mulch should cover the ground enough to shade it, but the mulch should not be so thick that a person standing cannot see ground through the mulch.
- 5. Remove matted mulch or bunches.
- 6. Collect and dispose of all baling wire or rope off-site.

3.03 SEEDING METHODS

A. General:

Fertilizer, limestone, mulch material if required, and seed of the type specified may be placed at the locations shown or ordered by one of the following methods, provided an even distribution is obtained. The maximum seeding depth shall be 1/4-inch when using methods other than hydroseeding.

B. Dry Method:

- 1. Power Equipment: Use mechanical seeders, seed drills, landscape seeders, cultipacker seeders, fertilizer spreaders, or other approved mechanical seeding equipment or attachments when seed, limestone, and fertilizer are to be applied in dry form.
- 2. Manual Equipment: On areas which are inaccessible to power equipment, permission may be given to use hand-operated mechanical equipment when the materials are to be applied in dry form. The use of hand shovels to spread the materials will not be allowed.
- 3. Do not mix limestone and fertilizer together prior to their application, but work into the soil together to the specified depth.
- 4. After seeding, compact the entire area by a suitable roller weighing 60 to 90 lbs. per linear foot.
- 5. Allow at least 24 hours between fertilizing and seeding.
- 6. Unless otherwise ordered, mulch areas covered with seed.

C. Hydraulic Method:

- 1. The application of grass, seed, fertilizer, limestone, and suitable mulch, if approved, may be accomplished in one operation by the use of an approved spraying machine.
- 2. Mix materials with water in the machine and keep in an agitated state in order that the materials may be uniformly suspended in the water.
- 3. The spraying equipment shall be so designed that when the solution is sprayed over an area, the resulting deposits of limestone, fertilizer, and grass seed are equal in quantity to the required rates.
- 4. Flush and clean hydraulic seeding and fertilizing machine each day before seeding is to be started, and thoroughly flush of all residue after the completion of application on every 10 acres.
- 5. If the results of the spray operations are unsatisfactory, abandon this method and apply the materials by the dry method.
- 6. When inoculum is required, mix with the seed and spray.
- 7. Compaction or rolling not required.
- 8. If mulch material is not applied during the seeding operation apply mulch within 1/2 hour following the seeding operation.

3.04 WINTER (DORMANT) SEEDING

Applies to seeding that occurs between October 15 and April 1 when ground temperatures are generally unfavorable for seed germination.

A. Seed Application Rate:

The permanent seed mix shall be applied at rate of 70 pounds per acre which is an approximate 25 percent increase in the rate specified in Sub-Part 3.02C4.

B. Mix Modification:

A companion crop of winter or annual rye shall be added to the mix at a rate of 52 pounds per acre (1.2 pounds per 1,000 square feet).

C. Method Modification:

On areas with slopes less than 10 percent, hydraulic methods of seeding shall not include a seed/mulch mix. Instead, provide two separate applications, first seed, and then mulch.

D. Mulch Type Modification:

Wood fiber (cellulose) mulch is not permitted for winter applications. Wood chips or hay/straw mulch shall be utilized on areas where erosion control matting is not required.

3.05 CARE AFTER SEEDING

A. Acceptance:

To be acceptable, grass shall show a reasonably thick, uniform stand, free from sizable areas of thin or bare spots, with a minimum coverage of approximately 80 percent as agreed by the Subcontractor and Engineer.

B. Repair:

Reseed any seeded areas which fail to show a uniform stand until all areas are covered with acceptable grass growth.

END OF SECTION	

SECTION XII

Measurement for Payment

06/06 XII-1

SECTION 01270

MEASUREMENT FOR PAYMENT

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This section covers the methods and procedures that the Department will use to measure the Contractor's work and provide payment. This general outline of the measurement and payment features will not, in any way, limit the Responsibility of the Contractor for making a thorough investigation of the Contract Documents to determine the scope of the work included in each bid task.
- B. Payment will be made to the Contractor in accordance with the specified methods of measurement and the unit or lump sum prices stipulated in the accepted bid. Payment will constitute complete compensation for all work required by the Contract Documents including all costs of accepting the general risks, liabilities and obligations, expressed or implied. Payment under all tasks will include, but necessarily be limited to, compensation for furnishing all supervision, labor, equipment, overhead, profit, material, services, applicable taxes, and for performing all other related work required. No other payment will be made.
- C. No payment will be made for work performed by the Contractor to replace defective work, work which is not required by the Contract Documents, work outside the limits of the Contract and additional work necessary due to actions of the Contractor, unless ordered by the Engineer in writing.
- D. For unit price items, the Contractor shall be paid for the actual amount of work accepted and for the actual amount of materials in place during the period of construction. After the work is completed and before final payment is made, the Engineer or Contractor as specified in the pay items will make final measurements to determine the quantities of the various items of work accepted as the basis for final payment. The Contractor shall accept compensation, as herein provided, in full payment for furnishing all materials, labor, tools, equipment, and incidentals necessary to the completed work and for performing all work contemplated and embraced by the Contract.
- E. For lump sum items, the Contractor will be paid on the basis of actual work accepted until the work item is completed. Upon completion of the item, 100 percent of the lump sum price may be paid, subject to the terms of the Agreement. The pay items listed below describe the measurement of and payment for the Work to be done under the respective items listed in the Bid as outlined in the approved schedule of values.
- F. All units of measurement shall be standard United States convention, as applied to the specific items of work by tradition and as interpreted by the Engineer. Each unit or lump sum price stated in the Bid shall constitute full compensation, as herein specified, for each item of the Work completed.

1.02 ENGINEER'S ESTIMATE OF QUANTITIES

A. The estimated quantities for unit price items, as listed in the bid schedule, are only approximate and are included solely for the purposes of the comparison of bids. The Engineer does not expressly, or by implication, agree that the nature of the materials encountered or required shall correspond therewith and reserves the right to increase or decrease any such quantity or to eliminate any quantity as the Engineer may deem necessary.

1.03 INCIDENTAL ITEMS

A. Except for the items designated hereunder for Measurement and Payment, the costs of items necessary to complete the work as specified are considered incidental to the items specified for Measurement and Payment. The costs of incidental items shall be included in the prices of items specified for Measurement and Payment.

1.04 QUANTITIES

A. The Estimated quantities indicated in the Bid Schedule are the quantities for the evaluation of bids. The actual quantities of items to be paid for on a unit price basis may vary significantly from the quantities indicated in the Bid Schedule.

1.05 RELATED PROVISIONS SPECIFIED ELSEWHERE

- A. Payment to Contractor: Refer to General Conditions and Contract Agreement Section 6.
- B. Changes in the Contract Price: Refer to General Conditions and Contract Agreement Section 6.

1.06 SUBMITTALS

A. Bid Breakdowns/Schedule of Values: Submit in accordance with Contract Documents Section VIII, Article 1.4, 1.6 and Article 13.

1.07 MEASUREMENT

A. Under this Contract, the Contractor shall provide all labor, equipment, and materials and shall complete all work as shown and described in the Contract Documents and as directed by the Engineer, in accordance with the expressed intent of the contract to secure a complete construction of a functionally complete project. The bid items described in Subpart 1.07, Bid Items shall together include all work set forth in the Contract Documents or required to properly complete the work. Any necessary work that is not described shall be considered included in the item to which it properly belongs. Where

used in the Contract Documents, the word "including" ("includes", "include") shall mean "including (includes, include) but not restricted to". Each item includes:

- 1. All labor, material, equipment, plant services, bonds and insurance, tests, adjustments, warranties, overhead, and other expenses required to perform the work.
- 2. All accessories, manuals, and services pertinent to the proper installation of materials and equipment.
- 3. All accessories, manuals, and services pertinent to the proper start-up, operation, and maintenance of materials and equipment.
- B. Lump Sum Items: Measurement of all Lump Sum Items will be on a total job basis.
 - 1. The quantities of work performed under lump sum items will not be measured except for the purpose of determining reasonable interim payments. Interim payments will be made in accordance with the estimated value of work performed and found acceptable as determined by the Engineer, or as specified in this section.
 - 2. Where indicated for a lump sum item, the Contractor shall provide a schedule of values per Subpart 1.06 of this Section. The schedule of values shall include a breakdown of major cost items included within the lump sum in sufficient detail to document specific costs of all items included in the lump sum item. The schedule of values shall be provided to the Engineer prior to initiation of work.
 - 3. Measurement for Progress Payments of all lump sum items will be on a percent complete basis as established in Contract Documents Section VI, Article 9.
- C. Unit Price Items: Where items are specified to be measured on a unit basis, measurement will be of each particular unit as specified.
 - 1. Volume Basis Where items are specified to be measured on a volume basis, the volume will be determined on an in-place basis (prior to excavation for excavation or after placement and compaction for imported fill) between the existing and final ground surfaces or grade lines shown on the Construction Contract Drawings. If no tolerance is specified, the tolerance shall be interpreted to be 0.00 foot.
 - 2. Area Basis Where items are specified to be measured on an area basis, the area will be measured as the actual surface area within the specified limits based on a plan view. If a specified width of an item is indicated, the area will be determined by the actual length along the centerline multiplied by the specified width. No adjustments will be made for the required overlap of materials.
 - 3. Length Basis Where items are specified to be measured on a length basis, the length will be measured as the actual length along the centerline within specified limits based on a plan view. No adjustments will be made for the required overlap of materials
 - 4. Weight Basis Where items are specified to be measured on a weight basis, the weight will be measured based on certified weigh scale tickets obtained from a weigh scale certified by the County Office of Weights and Measures and approved by the Engineer. The weights shall be taken in the presence of a

Department representative. When the weight is per ton, trucks shall be weighed entering the site and exiting the site, using either an on-site or off-site scale. The measured tonnage will be difference between to entering and exiting measured truck weight.

D. Measurement and payment will be made only for work that has been acceptably performed within the limits shown on the Construction Contract Drawings and in conformance with the Contract Specifications, as specified, or ordered by the Engineer.

1.08 DESCRIPTION OF BID ITEMS

- A. Bid Item LS-1 Mobilization/Demobilization (Limited to 7.5% of total bid amount)
 - 1. Bid Item LS-1 shall be bid lump sum price for Mobilization/Demobilization per the Contract Documents.
 - 2. Provide all materials, equipment, incidentals, and labor necessary to completely and properly furnish items in accordance with Specification Section 01045 Project Identification and Signs, Section 01110 Summary of Work, Section 01330 Submittal Procedures, Section 01410 Regulatory Requirement, Section 01352 Environmental Protection Procedures, Section 01500 Temporary Facilities and Controls, Section 01770 Project Closeout Procedures and as described below including, but not limited to:
 - a. Mobilization of personnel, equipment, and project facilities.
 - b. Temporary access roads.
 - c. Truck scale.
 - d. Decontamination pad.
 - e. Stockpile areas.
 - f. Temporary utilities.
 - g. Field offices and support areas.
 - h. Staging and storage areas.
 - i. Temporary project signage.
 - j. Environmental control measures.
 - k. Permitting.
 - 1. Meteorological station.
 - m. Sanitary facilities.
 - n. Project plans.
 - o. Schedules, submittals (shop drawings), and record drawings.
 - p. Bonds and insurance.
 - q. Demobilization.
 - r. Project closeout.
 - s. Final site cleanup.
 - t. Other work not specifically included in other items including: compliance with applicable regulatory requirements; preconstruction and construction period planning; scheduling, submittals, reporting, administration, and documentation; quality control; environmental protection; and spill control.

- 3. The Contractor shall submit a separate bid breakdown (See Paragraph 1.06 of this Section) that shows the individual costs required to complete this Bid Item.
- 4. Measurement for payment for Bid Item LS-1 Mobilization/Demobilization shall be paid the bid lump sum price for the above items completed, installed, and properly functioning as documented and approved by the Engineer. The Contractor may invoice for up to 70% of this item upon successful installation of the work and the remaining 30% at substantial completion. Payment shall be lump sum bid for each individual item described above, including mobilization, demobilization, and other work as submitted in the Contractor's bid breakdown.

B. Bid Item LS-2 – Site Survey

- 1. Bid Item LS-2 shall be bid lump sum price for Site Survey work properly performed per the Contract Documents.
- 2. Provide all materials, equipment, incidentals, and labor necessary to completely and properly furnish acceptable site surveys in accordance with Specification Section 01720 Field Engineering and Surveying and as described below, including but not limited to the following:
 - a. Perform initial field verification survey.
 - b. Set construction survey control (horizontal and vertical).
 - c. Provide construction survey (horizontal and vertical) layout.
 - d. Provide quality control field measurement to verify slopes, locations, and material layer thickness are in accordance with the requirements of the Contract Documents.
 - e. Perform surveys required for the calculation of material quantities in support of measurement for payment.
 - f. Perform final surveys of as-built conditions for incorporation into the project record documents.
- 3. The Contractor shall submit a separate bid breakdown (See Paragraph 1.06 of this Section) that shows the individual costs required to complete this Bid Item.
- 4. Measurement for Payment for Bid Item LS-2 shall be paid the bid lump sum price for Work successfully completed as documented and approved by the Engineer.

C. Bid Item LS-3–Construction Water Management

- 1. Bid Item LS-3 shall be bid lump sum price for Construction Water Management properly performed per the Contract Documents.
- 2. Provide all labor, materials, equipment, and incidentals necessary to completely and properly collect, handle, store, sample, test (waste characterization) and dispose of contaminated water generated during the proper execution of the Contract and in accordance with Specification Section 01500 Temporary Facilities and Controls, Section 02245 Construction Water Management, and Section 02300 Earthwork.
- 3. The Contractor shall submit a separate bid breakdown (See Paragraph 1.06 of

- this Section) that shows the individual costs required to complete this Bid Item.
- 4. Measurement for Payment for Bid Item LS-3 shall be paid the bid lump sum price for Construction Water Management successfully completed as documented and approved by the Engineer.

D. Bid Item LS-4 – Site Preparation

- 1. Bid Item LS-4 shall be bid lump sum price for Site Preparation per the Contract Documents.
- 2. Provide all materials, equipment, incidentals, and labor necessary to completely and properly prepare the site for construction in accordance with Specification Sections 02370 Erosion and Sedimentation Control, Section 02231 Clearing and Grubbing, Section 02300 Earthwork, and as described below.
 - a. Install required erosion and sedimentation controls including but not limited to stabilized construction access, silt fence, augmented silt fence, hay bales, stone check dams, temporary perimeter dike/swale, and sedimentation basin.
 - b. Maintain installed erosion and sedimentation controls.
 - c. Augment erosion and sedimentation controls as required.
 - d. Clear trees and brush within the limit of clearing delineation on the Construction Contract Drawings.
 - e. Grub vegetation within the defined limit of grading on the Construction Contract Drawings.
 - f. Transport, place, and compact grubbings approved for on-site disposal within the grubbings disposal area.
 - g. Transport and dispose all clearing and grubbing debris not permitted to be disposed on-site to a legal off-site disposal location.
- 3. Measurement for Payment for Bid Item LS-4 shall be paid the bid lump sum price for Site Preparation successfully completed as documented and approved by the Engineer.

E. Bid Item LS-5 – On-Site Waste Consolidation

- 1. Bid Item LS-5 shall be bid lump sum price for On-Site Waste Consolidation in accordance with Specification Sections 02110 Waste Removal, Handling, and Storage and Section 02300 Earthwork.
- 2. Provide all materials, equipment, incidentals, and labor necessary to completely excavate/remove solid waste, including, soils outside the new solid waste boundary to the lines and grades shown on the Excavation Plans of the Construction Contract Drawings. This work includes, but is not limited to, the following:
 - a. Excavate/remove solid waste between the existing and new solid waste boundaries.
 - b. Excavate solid waste inside the existing solid waste boundary, as required, to maintain maximum 3:1 slopes.

- c. Excavate/remove waste soil between the existing solid waste boundary and the limit of grading.
- d. Transport and deposit solid waste to stockpile locations within the new solid waste boundary for subgrade preparation (Subgrade Preparation is paid for under Item LS-6).
- e. Field screen and segregate clean from contaminated waste soil. Transport and deposit contaminated soil to stockpile locations within the new solid waste boundary. Transport clean waste soil to stockpiles for re-use during final site work.
- 3. Measurement for Payment for Bid Item LS-5shall be paid the bid lump sum price for On-Site Waste Consolidation successfully completed as documented and approved by the Engineer.

F. Bid Item LS-6 – Subgrade Preparation

- 1. Bid Item LS-6 shall be bid lump sum price for Subgrade Preparation in accordance with the Contract Documents.
- 2. Provide all materials, equipment, incidentals, and labor necessary to completely and properly prepare subgrade within the new solid waste boundary for construction of the Landfill Cover System in accordance with Section 02300 Earthwork, and as described below.
 - Place, grade, and compact solid waste including consolidated waste and waste soil from outside the new solid waste boundary as delineated on the Construction Contract Documents.
 - b. Excavate, relocate, fill, grade, and compact solid waste within the new solid waste boundary as required to achieve the grading performance criteria established for the project and as shown on the Construction Contract Drawings.
 - c. Install subgrade of slope benches and downdrains as shown on the Construction Contract Drawings.
- 3. Measurement for Payment for Bid Item LS-6 shall be paid the bid lump sum price for Site Preparation successfully completed as documented and approved by the Engineer.

G. Bid Item LS-7 – Landfill Cover System

- 1. Bid Item LS-7 shall be bid lump sum price for the Landfill Cover System per the Contract Documents.
- 2. Provide all materials, equipment, incidentals, and labor necessary to completely install a full depth landfill cover system to the limits established by the new solid waste boundary containing an area of approximately 3.72 acres as measured in the horizontal plane. Work shall be completed in accordance with Specification Section 02300 Earthwork, Specification Section 02921 Seeding and Soil Supplements, and as described below.

- a. Identify and test off-site borrow sources and mixed/manufactured materials to confirm chemical and geotechnical compliance with the Contract Documents.
- b. Place, grade, and compact imported cover system soils in the prescribed lift thicknesses to the full compacted layer thickness specified to the limits of the new solid waste boundary.
- c. Place, grade, and compact the cover soil termination from the new solid waste boundary to the adjacent subgrade outside the new solid waste boundary.
- d. Install cover system slope benches and downdrain, including riprap armoring.
- e. Install the riprap perimeter apron along the new solid waste boundary.
- f. Install seven (7) gas vents.
- g. Install topsoil, soil supplements, seed, and erosion control matting.
- h. Maintain and protect cover system during installation and until vegetative growth is established to the performance standard specified and to the satisfaction of the Engineer.
- 3. Measurement for Payment for Bid Item LS-7 shall be paid the bid lump sum price for Landfill Cover System successfully completed as documented and approved by the Engineer. The Contractor shall consider that the soil quantities required to construct the cover system must account for the three dimensional surface of the landfill and the termination of the cover system outside the limit of the new solid waste boundary.

H. Bid Item LS-8 – Final Site Work

- 1. Bid Item LS-8 shall be bid lump sum price for Final Site Work per the Contract Documents.
- 2. Provide all materials, equipment, incidentals and labor necessary to completely install the Final Site Work required in accordance with Specification Section 02300 Earthwork, Specification Section 02921 Seeding and Soil Supplements, and as described below.
 - a. Install drainage channels outside the new solid waste boundary
 - b. Install culverts and rock outlet protection.
 - c. Install Perimeter Access Road and Access Road.
 - d. Grade, topsoil, seed, and mulch all vegetated areas within the limit of grading.
 - e. Seed and mulch all disturbed vegetated areas within the limit of work.
 - f. Clean the sedimentation basin and outlet structure of sediment and dispose of the sediment in a responsible manner.
 - g. Convert the sedimentation basin to a detention basin.
 - h. Install chain link fence and gate along the South Hill Road frontage.
 - i. Install warning signage at the prescribed interval along the Site property boundary.
- 3. Measurement for Payment for Bid Item LS-8 shall be paid the bid lump sum

price for Final Site Work successfully completed as documented and approved by the Engineer.

I. Bid Item LS-9– Groundwater Monitoring Wells

- 1. Bid Item LC-9 shall be bid lump sum price for Groundwater Monitoring Wells per the Contract Documents.
- Provide all labor, materials, equipment, and incidentals necessary to completely abandon two existing groundwater monitoring wells and install two functioning replacement groundwater monitoring wells in accordance with Specification Section 02526 – Well Abandonment and Section 02522 – Groundwater Monitoring Wells and described below.
 - a. Abandon existing groundwater monitoring wells MW-3S, and MW-3B.
 - b. Drill two boreholes at the locations and depths specified.
 - c. Install two new groundwater monitoring wells per the construction methods specified in the Contract Documents.
 - d. Log borings and well construction information as specified.
 - e. Develop the new groundwater monitoring wells at the completion of installation.
 - f. Provide new identification tags for nine (9) wells (new and existing) as described in the specification.
- 3. Measurement for payment of Bid Item LS-9 –Groundwater Monitoring Wells shall be paid the bid lump sum price for Groundwater Monitoring Wells successfully completed as documented and approved by the Engineer.

J. Bid Item LS-10 – ALTA Survey

- 1. Bid Item LS-10 shall be bid lump sum price for ALTA Survey work properly performed per the Contract Documents.
- 2. Provide all materials, equipment, incidentals, and labor necessary to completely and properly furnish an acceptable ALTA Survey in accordance with Specification Section 01720 Field Engineering and Surveying.
- 3. The Contractor shall submit a separate bid breakdown (See Paragraph 1.06 of this Section) that shows the individual costs required to complete this Bid Item.
- 4. Measurement for Payment for Bid Item LS-10 shall be paid the bid lump sum price for ALTA Survey successfully completed as documented and approved by the Engineer.

- K. Bid Item UC-1 Site Services (Limited to 7.5% of total bid amount)
 - 1. Bid Item UC-1 shall be bid unit cost price per day for Site Services properly performed per the Contract Documents.
 - 2. Provide all labor, materials, equipment, and incidentals necessary for each calendar day of site services in accordance with Specification Section 01110 Summary of Work, Section 01450 Contractor Quality Control, Section 01500 Temporary Facilities and Controls, and described below.
 - a. Site Security.
 - b. Traffic Control.
 - c. Access Road Maintenance.
 - d. Disposal of Contractor generated solid waste.
 - e. Compliance with permits.
 - f. Project Meetings.
 - g. Site Superintendence.
 - h. Quality Control Management.
 - i. Decontamination pad maintenance.
 - j. Staging/Stockpile area maintenance.
 - k. Utilities maintenance.
 - Sanitary facilities maintenance.
 - 3. The Contractor shall submit a separate bid breakdown (See Paragraph 1.06 of this Section) that shows the individual costs required to complete this Bid Item.
 - 4. Measurement for payment for Bid Item UC-1 Site Services shall be paid the bid unit price for each calendar day beginning after satisfactory installation of site facilities and ending at substantial completion or at the end of the Contract Time specified in Contract Documents Section VI Article 6.1, whichever is sooner. Payment shall be unit price bid for each individual item described above as submitted in the Contractor's bid breakdown. A fifty percent reduction in payment would occur for each calendar day that operation and/or maintenance of any item included in this Bid Item was unsatisfactory or unused as determined by the Engineer.
- L. Bid Item UC-2 Health and Safety
 - 1. Bid Item UC-2 shall be bid unit cost price per day for Health and Safety per the Contract Documents.
 - 2. Provide all labor, materials, equipment and incidentals necessary for each calendar day for health and safety during proper execution of the Contract and in accordance with Contract Documents Section X, Standard Section 0003, Specification Section 01110 Summary of Work, Section 01500 Temporary Facilities and Controls, Section 01560 Dust and Odor Control, and as directed below.
 - a. Health and Safety Officer.
 - b. Decontamination station.
 - c. Health and Safety equipment.

- d. Emergency response.
- e. Air monitoring.
- f. Dust control.
- g. Sampling, analysis, and handling/disposal of Personal Protective Equipment (PPE) and remediation wastes not specifically included in other bid items.
- 3. The Contractor shall submit a bid breakdown showing the capital and daily O&M costs for items included in this Bid Item (Items not included in Bid Item UC-1, Site Services).
- 4. Measurement for payment for Bid Item UC-2 Health and Safety shall be paid the bid unit price for each calendar day the HASP has been adhered to in the opinion of the Engineer. Work included in this item shall be by calendar day for each day on-site wastes (bulky wastes, solid wastes, and/or construction water) are handled including excavating/removing, loading, filling, grading, and/or compacting. All daily maintenance costs for health and safety are part of this Bid Item including everything required for the HASP. A reduction in the payment for this item will occur for each day the Contractor fails to adhere (in the opinion of the Engineer) to the HASP. There will be one hundred (100) percent reduction in this Bid Item for days where no handling of on-site wastes occurs. No payment will be made for Saturdays, Sundays and holidays specified in Contract Documents Section XIII.

M. Bid Item UC-3 – Confirmation Sampling and Testing

- 1. Bid Item UC-3 shall be bid unit cost price per sample for Confirmation Sampling and Testing per the Contract Documents.
- 2. Provide all labor, materials, equipment, and incidentals necessary for each confirmation sample collected and tested in accordance with Specification Section 02105 Chemical Sampling and Analysis.
- 3. Measurement for payment for Bid Item UC-3 Confirmation Sampling and Testing shall be paid the bid unit price for each sample collected and tested. Payment shall be unit price bid for each individual item described above as submitted in the Contractor's bid breakdown.

N. Bid Item UC-4 – Documentation Sampling and Testing

- 1. Bid Item UC-4 shall be bid unit cost price per sample for Documentation Testing and Analysis per the Contract Documents.
- 2. Provide all labor, materials, equipment, and incidentals necessary for each documentation sample collected and tested in accordance with Specification Section 02105 Chemical Sampling and Analysis.
- 3. Measurement for payment for Bid Item UC-4 –Documentation Sampling and Testing shall be paid the bid unit price for each sample collected and tested. Payment shall be unit price bid for each individual item described above as submitted in the Contractor's bid breakdown.

- O. Bid Item UC-5 Bulky Waste-Metal Removal and Off-Site Transportation and Disposal
 - 1. Bid Item UC-5 shall be bid unit cost price per ton for Bulky Waste-Metal Removal and Off-Site Transportation and Disposal per the Contract Documents.
 - 2. Provide all labor, materials, equipment, and incidentals necessary for each ton of metal removed, transported, and disposed off-site in accordance with Specification Section 02110 Waste Removal, Handling, and Storage and Section 02120 Off-Site Transportation and Disposal and described below.
 - a. Remove, handle, and store on-site Bulky Wastes Metal in compliance with all federal, state and local laws, rules, and regulations.
 - b. Furnish and load trucks.
 - c. Secure loads for safe and legal transport.
 - d. Weigh trucks prepared for transport on-site prior to departure and report results to the Engineer.
 - e. Transport Bulky Waste- Metal to an approved licensed off-site Treatment, Storage, and/or Disposal Facility, Solid Waste Management Facility, and/or Recovery/Recycling Facility and dispose of the material in accordance with the facility requirements.
 - 3. Measurement for payment of Bid Item UC-5 Bulky Waste-Metal Removal and Off Site Transportation and Disposal shall be for the actual tons of metal disposed at the approved disposal facility. Weight measurement shall be by certified scale and documented by certified weight ticket issued by the disposal facility. Certified weight tickets shall be submitted to the Engineer for comparison to on-site weight measurement prior to approval.
- P. Bid Item UC-6 Bulky Waste-Tire Removal and Off-Site Transportation and Disposal
 - 1. Bid Item UC-6 shall be bid unit cost price per ton for Bulky Waste-Tire Removal and Off-Site Transportation and Disposal per the Contract Documents.
 - 2. Provide all labor, materials, equipment, and incidentals necessary for tires removed, transported, and disposed off-site in accordance with Specification Section 02110 Waste Removal, Handling, and Storage and Section 02120 Off-Site Transportation and Disposal, and described below.
 - a. Remove, handle, and store on-site Bulky Wastes Tires in compliance with all federal, state and local laws, rules, and regulations.
 - b. Furnish and load trucks.
 - c. Secure loads for safe and legal transport.
 - d. Weigh trucks prepared for transport on-site prior to departure and report results to the Engineer.
 - e. Transport Bulky Waste- Tires to an approved licensed off-site Treatment, Storage, and/or Disposal Facility, Solid Waste Management Facility, and/or Recovery/Recycling Facility and dispose of the material in accordance with the facility requirements.
 - 3. Measurement for payment of Bid Item UC-6 Bulky Waste-Tire Removal and

Off Site Transportation and Disposal shall be shall be for the actual tons of tires disposed at the approved disposal facility. Weight measurement shall be by certified scale and documented by certified weight ticket issued by the disposal facility. Certified weight tickets shall be submitted to the Engineer for comparison to on-site weight measurement prior to approval.

- Q. Bid Item UC-7 Bulky Waste-Miscellaneous Removal and Off-Site Transportation and Disposal
 - 1. Bid Item UC-7 shall be bid unit cost price per ton for Bulky Waste-Miscellaneous Removal and Off-Site Transportation and Disposal per the Contract Documents.
 - 2. Provide all labor, materials, equipment, and incidentals necessary for each ton of bulky waste removed, transported, and disposed off-site in accordance with Specification Section 02110 Waste Removal, Handling, and Storage, and Section 02120 Off-Site Transportation and Disposal, and described below.
 - a. Remove, handle, and store on-site Bulky Wastes Miscellaneous in compliance with all federal, state and local laws, rules, and regulations.
 - b. Furnish and load trucks.
 - c. Secure loads for safe and legal transport.
 - d. Weigh trucks prepared for transport on-site prior to departure and report results to the Engineer.
 - e. Transport Bulky Waste- Miscellaneous to an approved licensed off-site Treatment, Storage, and/or Disposal Facility, Solid Waste Management Facility, and/or Recovery/Recycling Facility and dispose of the material in accordance with the facility requirements.
 - 3. Measurement for payment of Bid Item UC-7 Bulky Waste-Miscellaneous Removal and Off Site Transportation and Disposal shall be for the actual tons of miscellaneous bulky waste disposed at the approved disposal facility. Weight measurement shall be by certified scale and documented by certified weight ticket issued by the disposal facility. Certified weight tickets shall be submitted to the Engineer for comparison to on-site weight measurement prior to approval.

R. Bid Item UC-8 – Excess On-Site Waste Consolidation

- 1. Bid Item UC-8 shall be bid unit cost price per cubic yard for Excess On-Site Waste Consolidation in accordance with Specification Section 02105 Chemical Sampling and Analysis and Section 02300 Earthwork.
- 2. Provide all materials, equipment, incidentals, and labor necessary to completely excavate/remove solid waste including soil beyond the existing limit of excavation as depicted by the excavation contours on the Excavation Plans of the Contract Documents based on results of the confirmation sampling and testing.
- 3. Measurement for payment of Bid Item UC-8 Excess On-Site Waste Consolidation shall be for the actual in-place cubic yards of on-site solid waste/soil excavated beyond the limit of excavation as measured on a volume basis by comparing field survey of existing grade to the excavated subgrade between the proposed limit of excavation and the confirmed clean boundary. Limit of excavation and volume calculation shall be reviewed and approved by the Engineer.

S. Bid Item UC-9 – Imported Select Borrow

- 1. Bid Item UC-9 shall be bid unit cost price per ton for Imported Select Borrow per the Contract Documents.
- 2. Provide all labor, materials, equipment, and incidentals necessary to provide Select Borrow as necessary to establish subgrade inside the new solid waste boundary and/or final grade outside the new solid waste boundary in accordance with Specification Section 02300 Earthwork, the grading performance criteria and described below:
 - a. Identify and test off-site borrow source to confirm chemical and geotechnical compliance with the Contract Documents.
 - b. Furnish and load trucks.
 - c. Transport imported Select Borrow to the Site in a legal and safe manner.
 - d. Weigh each truck on-site as it arrives and report results to the Engineer.
 - e. Offload, stockpile, handle, and manage imported Select Borrow on-site as required to coordinate with construction.
 - f. Place, grade, and compact Select Borrow in required fill areas.
- 3. Measurement for payment of Bid Item UC-9 Imported Select Borrow shall be for the actual tons of imported Select Borrow as measured on a weight basis and documented by certified weight slips from a certified scale at the borrow source. Certified weight tickets shall be submitted to the Engineer for comparison to onsite weight measurement prior to approval.

T. Bid Item UC-10 – Solid Waste Off-Site Transportation and Disposal

- 1. Bid Item UC-10 shall be bid unit cost price per ton for Solid Waste Off-Site Transportation and Disposal per the Contract Documents.
- 2. Provide all labor, materials, equipment, and incidentals necessary to provide

Solid Waste Off-Site Transportation and Disposal, as necessary, for excess solid waste that exceeds available fill capacity within the new solid waste boundary and cannot be used as Select Borrow outside the new solid waste boundary in accordance with Specification Section 02105 – Chemical Sampling and Analysis, Section 02110 – Waste Removal, Handling, and Storage, Section 02120 – Off-Site Transportation and Section Specification Section 02300 – Earthwork and as described below:

- a. Perform waste characterization sampling and analysis in accordance with the Contract Documents and the specific requirements of the disposal facility.
- b. Remove, handle, and store on-site solid waste for off-site transportation and disposal in compliance with all federal, state and local laws, rules, and regulations.
- c. Furnish and load trucks.
- d. Secure loads for safe and legal transport.
- e. Weigh trucks prepared for transport on-site prior to departure and report results to the Engineer.
- f. Transport solid waste to an approved licensed off-site Treatment, Storage, and/or Disposal Facility, Solid Waste Management Facility, and/or Recovery/Recycling Facility and dispose of the material in accordance with the facility requirements.
- 3. Measurement for payment of Bid Item UC-10 Solid Waste Off-Site Transportation and Disposal shall be for the actual tons of solid waste as measured on a weight basis documented by certified weight slips from a certified scale at the disposal facility. Certified weight tickets shall be submitted to the Engineer for comparison to on-site weight measurement prior to approval.
- U. Bid Item UC-11 Hazardous Waste Drum Removal and Off-Site Transportation and Disposal
 - 1. Bid Item UC-11 shall be bid unit cost price per each intact and/or damaged drum with hazardous liquid, semi-solid, solid contents, or residual content and any intact and/or damaged drum with non-hazardous liquid content uncovered during landfill waste consolidation or grading to establish landfill subgrade per the Contract Documents.
 - 2. Provide all labor, materials, equipment, and incidentals necessary to handle, manage, transport, and dispose of each drum as required in accordance with Specification Section 02105 Chemical Sampling and Analysis, Specification Section 02110 Waste Removal, Handling, and Storage, Section 02120 Off-Site Transportation and Disposal, Section 02140 –Drums and Visually Impacted Soil Removal, Handling, and Storage and as described below.
 - a. Perform waste characterization sampling and analysis in accordance with the Contract Documents and the specific requirements of the disposal facility.

- b. Perform documentation sampling and analysis of the excavation bottom associated with drum and/or visually impacted soil removal.
- c. Prepare each drum for off-site transport and disposal including overpacking existing damaged or leaking drums or providing new drums to contain visually impacted wastes characterized as hazardous adjacent to drums.
- d. Furnish and load trucks.
- e. Secure loads for safe and legal transport.
- f. Transport drums in a legal and safe manner off-site to an approved licensed Treatment, Storage, and/or Disposal Facility (TSDF) and dispose of the material in accordance with the facility requirements.
- 3. Measurement for payment of Bid Item UC-11– Hazardous Waste Drum Removal and Off-Site Transportation and Disposal shall be for the actual number of drums filled or partially filled with hazardous solid, semi-solid, liquid, or residual contents and the actual number of drums filled or partially filled with non-hazardous liquids transported and disposed off-site at a hazardous waste TSDF. Drums with solid/semi-solid content or residual content characterized as non-hazardous will be emptied or emptied/bulked on-site and shall be incorporated into the waste within the new solid waste boundary. This work is considered an incidental component to Waste Consolidation. Uncovered empty drum carcasses or emptied drums that contained non-hazardous solid or semi-solid waste shall be transported and disposed off-site as Bulky Waste-Metal and will be paid under the Bulky Waste Removal-Metal and Off-Site Transportation and Disposal bid item.

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

Not Applicable

END OF SECTION

SECTION XIII

Wage Rates and Associated Contract Requirements



Andrew M. Cuomo, Governor

Colleen C. Gardner, Commissioner

NYS Dept. Env. Conservation

David Chiusano, Env. Engineer / Proj. Manager Div. Environ. Remediation 625 Broadway 12th Floor Albany NY 12233-7017 Schedule Year Date Requested PRC#

2010 through 2011 02/18/2011 2010008096

Location Cortland County

Project ID#

Project Type Remediation of NYS State Superfund inactive hazardous waste site

PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Wage Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2010 through June 2011. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website www.labor.state.ny.us. Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

NOTICE OF COMPLETION / CANCELLATION OF PROJECT		
Date Completed:	Date Cancelled:	
Name & Title of Representative:		

Phone: (518) 457-5589 Fax: (518) 485-1870 W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

General Provisions of Laws Covering Workers on Article 8 Public Work Contracts

Introduction

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

Responsibilities of the Department of Jurisdiction

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission: a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract MUST obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule MUST be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Both the PW 16 and PW 200 forms are available for completion online.

Hours

No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

There are very few exceptions to this rule. Complete information regarding these exceptions is available on the "4 Day / 10 Hour Work Schedule" form (PW 30R).

Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12240; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website www.labor.state.ny.us.

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website www.labor.state.ny.us.

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website www.labor.state.ny.us.

Payrolls and Payroll Records

Every contractor and subcontractor MUST keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. Payrolls must be maintained for at least three (3) years from the project's date of completion. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid or provided, and Daily and weekly number of hours worked in each classification.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, by are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8. Section 220-a).

Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

Withholding of Payments

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

Summary of Notice Posting Requirements

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "Public Work Project" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers. compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers. Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

Apprentices

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeyworkers in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyworker's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12240 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

Interest and Penalties

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

Debarment

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

Criminal Sanctions

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

Discrimination

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c)).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d)).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

Workers' Compensation

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Unemployment Insurance

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.

Andrew M. Cuomo, Governor

Colleen C. Gardner, Commissioner

NYS Dept. Env. Conservation

David Chiusano, Env. Engineer / Proj. Manager Div. Environ. Remediation 625 Broadway 12th Floor Albany NY 12233-7017 Schedule Year Date Requested PRC# 2010 through 2011 02/18/2011 2010008096

Location

Cortland County

Project ID#

Project Type Remediation of NYS State Superfund inactive hazardous waste site

Notice of Contract Award

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

Contractor InformationAll information must be supplied

Federal Employer Identification N	umber:		
Name:			
City:		State:	Zip:
Amount of Contract:	\$	Co	ntract Type:
Approximate Starting Date:	//		[] (01) General Construction [] (02) Heating/Ventilation
Approximate Completion Date:	//		[] (03) Electrical [] (04) Plumbing [] (05) Other :

Phone: (518) 457-5589 Fax: (518) 485-1870 W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

IMPORTANT NOTICE

FOR

CONTRACTORS & CONTRACTING AGENCIES

Social Security Numbers on Certified Payrolls

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concerns with regard to inclusion of this information on payrolls if another identifier will suffice.

For these reasons, the substitution of the use of the <u>last four digits</u> of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor.

NOTE: This change does not affect the Department's ability to request and receive the entire social security number from employers during the course of its public work / prevailing wage investigations.

To all State Departments, Agency Heads and Public Benefit Corporations IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

Budget Policy & Reporting Manual

B-610

Public Work Enforcement Fund

effective date December 7, 2005

1. Purpose and Scope:

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

2. Background and Statutory References:

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

3. Procedures and Agency Responsibilities:

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.

To all State Departments, Agency Heads and Public Benefit Corporations IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor Administrative Finance Bureau-PWEF Unit Building 12, Room 464 State Office Campus Albany, NY 12240

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.

NEW LEGISLATION

Required Posting For Labor Law Article 25-B § 861-d

Construction Industry Fair Play Act

- Construction industry employers must post the "Construction Industry Fair Play Act" notice in a prominent and accessible place on the job site.
- Failure to post the notice can result in penalties of up to \$1,500 for a first offense and up to \$5,000 for a second offense.
- The posting is included as part of this wage schedule. Additional copies may be obtained from the NYS DOL website, www.labor.ny.gov.

If you have any questions concerning the Fair Play Act, please call the State Labor Department toll-free at 1-866-435-1499 or email us at: dol.misclassified@labor.state.ny.us.



New York State Department of Labor Required Notice under Article 25-B of the Labor Law

ATTENTION ALL EMPLOYEES, CONTRACTORS AND SUBCONTRACTORS: YOU ARE COVERED BY THE CONSTRUCTION INDUSTRY FAIR PLAY ACT

The law says that you are an employee <u>unless</u>:

- You are free from direction and control in performing your job AND
- You perform work that is not part of the usual work done by the business that hired you AND
- You have an independently established business

Your employer cannot consider you to be an independent contractor unless all three of these facts apply to your work.

IT IS AGAINST THE LAW FOR AN EMPLOYER TO MISCLASSIFY EMPLOYEES AS INDEPENDENT CONTRACTORS OR PAY EMPLOYEES OFF-THE-BOOKS.

Employee rights. If you are an employee:

- You are entitled to state and federal worker protections such as
 - unemployment benefits, if unemployed through no fault of your own, able to work, and otherwise qualified
 - o workers' compensation benefits for on-the-job injuries
 - o payment for wages earned, minimum wage, and overtime (under certain conditions)
 - o prevailing wages on public work projects
 - o the provisions of the National Labor Relations Act and
 - o a safe work environment
- It is a violation of this law for employers to retaliate against anyone who asserts their rights under the law. Retaliation subjects an employer to civil penalties, a private lawsuit or both.

Independent Contractors: If you are an independent contractor:

You must pay all taxes required by New York State and Federal Law.

Penalties for paying off-the-books or improperly treating employees as independent contractors:

• **Civil Penalty** First Offense: up to \$2,500 per employee.

Subsequent Offense(s): up to \$5,000 per employee.

• Criminal Penalty First Offense: Misdemeanor - up to 30 days in jail, up to a \$25,000 fine

and debarment from performing Public Work for up to one year. Subsequent Offense(s): Misdemeanor - up to 60 days in jail, up to a \$50,000 fine and debarment from performing Public Work for up to 5

years.

If you have questions about your employment status or believe that your employer may have violated your rights and you want to file a complaint, call the Department of Labor at 1(866)435-1499 or send an email to dol.misclassified@labor.state.ny.us. All complaints of fraud and violations are taken seriously and you can remain anonymous.

Employer Name:

IA 999 (09/10)

NEW LEGISLATION

Effective February 24, 2008

WORKER NOTIFICATION – A9052 – S6240

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the prevailing wage rate for their particular job classification on each pay stub*. It also requires contractors and subcontractors to post a notice at the beginning of the performance of every public work contract on each job site that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her particular job classification. The required notification will be provided with each wage schedule, may be downloaded from our website www.labor.state.ny.us or made available upon request by contacting the Bureau of Public Work at 518-457-5589.

^{*} In the event that the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

New York State Department of Labor Bureau of Public Work

Attention Employees

THIS IS A: PUBLIC WORK PROJECT

If you are employed on this project as a worker, laborer, or mechanic you are entitled to receive the prevailing wage and supplements rate for the classification at which you are working.

Chapter 629 of the Labor Laws of 2007: These wages are set by law and must be posted at the work site. They can also be found at: www.labor.ny.gov

If you feel that you have not received proper wages or benefits, please call our nearest office.*

Albany	(518) 457-2744	Patchogue	(631) 687-4886
Binghamton	(607) 721-8005	Rochester	(585) 258-4505
Buffalo	(716) 847-7159	Syracuse	(315) 428-4056
Garden City	(516) 228-3915	Utica	(315) 793-2314
New York City	(212) 775-3568	White Plains	(914) 997-9507
Newburgh	(845) 568-5398		, ,

* For New York City government agency construction projects, please contact the Office of the NYC Comptroller at (212) 669-4443, or www.comptroller.nyc.gov – click on Bureau of Labor Law.

Contractor Name:	
Project Location:	

NEW LEGISLATION

Effective July 18, 2008

OSHA 10-hour Construction Safety and Health Course – S1537-A

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, section 220-h. It requires that on all public work projects of at least \$250,000.00, all laborers, workers and mechanics working on the site, be certified as having successfully completed the OSHA 10-hour construction safety and health course. It further requires that the advertised bids and contracts for every public work contract of at least \$250,000.00, contain a provision of this requirement.

NOTE: The OSHA 10 Legislation does not apply to projects advertised for bid prior to July 18, 2008 AND only applies to workers on a public work project that are required under Article 8 to receive the prevailing wage.

Rules and regulations will be promulgated and posted on the NYSDOL website www.labor.state.ny.us when finalized.

Where to find OSHA 10-hour Construction Course

1. NYS Department of Labor website for scheduled outreach training at:

www.labor.state.ny.us/workerprotection/safetyhealth/DOSH_ONSITE_CONSULTATION.shtm

2. OSHA Training Institute Education Centers:

Rochester Institute of Technology OSHA Education Center

Rochester, NY

Donna Winter

Fax (585) 475-6292

e-mail: <u>dlwtpo@rit.edu</u>

(866) 385-7470 Ext. 2919

www.rit.edu/~outreach/course.php3?CourseID=54

Atlantic OSHA Training Center

UMDNJ - School of Public Health

Piscataway, NJ

Janet Crooks

Fax (732) 235-9460

e-mail: crooksje@umdnj.edu

(732) 235-9455

https://ophp.umdnj.edu/wconnect/ShowSchedule.awp?~~GROUP~AOTCON~10~

Keene State College

Manchester, NH

Leslie Singleton

e-mail: lsingletin@keene.edu

(800) 449-6742

www.keene.edu/courses/print/courses_osha.cfm

3. List of trainers and training schedules for OSHA outreach training at:

www.OutreachTrainers.org

Requirements for OSHA 10 Compliance

Chapter 282 of the Laws of 2007, codified as Labor Law 220-h will take effect on July 18, 2008. The statute provides as follows:

The advertised specifications for every contract for public work of \$250,000.00 or more must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors receive such training "prior to the performing any work on the project."

The Bureau will enforce the statute as follows:

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- copies of bona fide course completion card;
- training roster, attendance record of other documentation from the certified trainer pending the issuance of the card.
- other valid proof

**A certification by the employer attesting that all employees have completed such course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-485-5696.

WICKS Reform 2008

(For all contracts advertised or solicited for bid on or after 7/1/08)

- Raises the threshold for public work projects subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work. The total project's threshold would increase from \$50,000 to: \$3 million in Bronx, Kings, New York, Queens and Richmond counties; \$1.5 million in Nassau, Suffolk and Westchester counties; and \$500,000 in all other counties.
- For projects below the monetary threshold, bidders must submit a sealed list naming each subcontractor for the plumbing, HVAC and electrical work and the amount to be paid to each. The list may not be changed unless the public owner finds a legitimate construction need, including a change in specifications or costs or use of a Project Labor Agreement (PLA), and must be open to public inspection.
- Allows the state and local agencies and authorities to waive the Wicks Law and
 use a PLA if it will provide the best work at the lowest possible price. If a PLA is
 used, all contractors shall participate in apprentice training programs in the
 trades of work it employs that have been approved by the Department of Labor
 (DOL) for not less than three years. They shall also have at least one graduate
 in the last three years and use affirmative efforts to retain minority apprentices.
 PLA's would be exempt from Wicks, but deemed to be public work subject to
 prevailing wage enforcement.
- The Commissioner of Labor shall have the power to enforce separate specification requirements on projects, and may issue stop-bid orders against public owners for non-compliance.
- Other new monetary thresholds, and similar sealed bidding for non-Wicks projects, would apply to certain public authorities including municipal housing authorities, NYC Construction Fund, Yonkers Educational Construction Fund, NYC Municipal Water Finance Authority, Buffalo Municipal Water Finance Authority, Westchester County Health Care Association, Nassau County Health Care Corp., Clifton-Fine Health Care Corp., Erie County Medical Center Corp., NYC Solid Waste Management Facilities, and the Dormitory Authority.
- Reduces from 15 to 7 days the period in which contractors must pay subcontractors.

IMPORTANT INFORMATION

Regarding Use of Form PW30R

"Employer Registration for Use of 4 Day / 10 Hour Work Schedule"

To use the '4 Day / 10 Hour Work Schedule':

There MUST be a *Dispensation of Hours (PW30)* in place on the project

AND

You MUST register your intent to work 4 / 10 hour days, by completing the PW30R Form.

REMEMBER...

The '4 Day / 10 Hour Work Schedule' applies ONLY to Job Classifications and Counties listed on the PW30R Form.

(**Please note**: For each Job Classification check the individual wage schedule for specific details regarding their 4/10 hour day posting.)

Instructions for Completing Form PW30R

"Employer Registration for Use of 4 Day / 10 Hour Work Schedule"

Before completing Form PW30R check to be sure ...

- There is a Dispensation of Hours in place on the project.
- The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.
- The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

Instructions (Type or Print legibly):

Contractor Information:

- Enter the Legal Name of the business, FEIN, Street Address, City, State, Zip Code; the Company's Phone and Fax numbers; and the Company's email address (if applicable)
- Enter the Name of a Contact Person for the Company along with their Phone and Fax numbers, and the personal email address (if applicable)

Project Information:

- Enter the Prevailing Rate Case number (PRC#) assigned to this project
- Enter the Project Name / Type (i.e. Smithtown CSD Replacement of HS Roof)
- Enter the Exact Location of Project (i.e. Smithtown HS, 143 County Route #2, Smithtown,NY;
 Bldgs. 1 & 2)
- If you are a Subcontractor, enter the name of the Prime Contractor for which you work
- On the Checklist of Job Classifications
 - o Go to pages 2 and 3 of the form
 - o Place a checkmark in the box to the right of the Job Classification you are choosing
 - Mark all Job Classifications that apply

Requestor Information:

• Enter the name of the person submitting the registration, their title with the company , and the date the registration is filled out

Return Completed Form:

- Mail the completed PW30R form (3 pages) to: NYSDOL Bureau of Public Work, SOBC Bldg.12 Rm.130, Albany, NY 12240 -OR -
- Fax the completed PW30R form (3 pages) to: NYSDOL Bureau of Public Work at (518)485-1870



New York State Department of Labor Bureau of Public Work

W. Averell Harriman State Office Campus Building 12 - Room 130 Albany, New York 12240 Phone - (518) 457-5589 Fax - (518) 485-1870

Employer Registration for Use of 4 Day / 10 Hour Work Schedule

Before completing Form PW30R check to be sure ...

There is a Dispensation of Hours in place on the project.

The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.

The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

Please Type or Print the Requested Information

When completed ...

Mail to NYSDOL Bureau of Public Work, SOBC, Bldg. 12, Rm.130, Albany, NY 12240

Fax to NYSDOL Bureau of Public Work at (518) 485-1870

Contractor Info	rmation		
Company Name:			FEIN:
Address:			
		_	Zip Code:
Phone Number	Fax Number:	Email Ad	dress:
Contact Person:			
	Fax No:		
Project Informa	tion		
Project PRC#:	Proj	iect Name/Type:	
Exact Location of Project:		Co	ounty:
(If you are Subcontractor)	2:		
	Vork 4/10 Schedule: (<u>Choose all</u>		
Requestor Inform	mation		
Name:			
Title:		Date :	

PW-30R (07-09) 1 of 3

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

Job Classification	Tag #	Applicable Counties	Check Box
Electrician	25m	Nassau, Suffolk	
Electrician	43	Cayuga, Chenango, Cortland, Herkimer, Madison, Oneida, Onondaga, Oswego, Otsego, Tompkins, Wayne	
Electrician	840Teledata	Cayuga, Onondaga, Ontario, Seneca, Wayne, Yates	
Electrician	86	Genesee, Livingston, Monroe, Ontario, Orleans, Wayne, Wyoming	
Electrician Lineman	1049Line/Gas	Nassau, Suffolk	
Electrician Lineman	1249a	Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates	
Elevator Constructor	138	Columbia, Delaware, Dutchess, Greene, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	
Elevator Constructor	14	Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, Wyoming	
Elevator Constructor	27	Chemung, Livingston, Monroe, Ontario, Schuyler, Seneca, Steuben, Wayne, Yates	
Elevator Constructor	35	Albany, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamiliton, Herkimer, Montgomery, Oneida, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington	
Elevator Constructor	62.1	Broome, Cayuga, Chenango, Cortland, Delaware, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence, Tioga, Tompkins	
Glazier	677.1	Jefferson, Lewis, Livingston, Monroe, Ontario, Seneca, St. Lawrence, Wayne, Yates	
Insulator - Heat & Frost	30-Syracuse	Broome, Cayuga, Chemung, Chenango, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Tioga, Tompkins	

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

Job Classification	Tag#	Applicable Counties	Check Box
Operating Engineer - Heavy& Highway	832H	Allegany, Chemung, Genesee, Livingston, Monroe, Ontario, Schuyler, Steuben, Wayne, Yates	
Painter	178 B	Broome, Chenango, Tioga	
Painter	178 E	Chemung, Schuyler, Steuben	
Painter	178 O	Delaware, Otsego	
Painter	31	Cayuga, Herkimer, Lewis, Madison, Oneida, Onondaga, Ontario, Oswego, Seneca	
Painter	38.O	Oswego	
Painter	4-Buf,Nia, Olean	Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Livingston, Niagara, Orleans, Steuben, Wyoming	
Painter	4-Jamestown	Cattaraugus, Chautauqua	
Sheetmetal Worker	46	Livingston, Monroe, Ontario, Seneca, Wayne, Yates	
Teamster - Heavy&Highway	294h/h	Albany, Columbia, Fulton, Greene, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington	
Teamster - Heavy&Highway	317a.hh	Allegany, Cayuga, Cortland, Seneca, Steuben, Tompkins, Wayne, Yates	
Teamster - Heavy&Highway	693.H/H	Broome, Chenango, Delaware, Otsego, Tioga	

Introduction to the Prevailing Rate Schedule

Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a county-by-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

Overtime

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is for each hour worked, some classifications require the payment or provision of supplements for each hour paid (including paid holidays on which no work is performed) and/or may require supplements to be paid or provided at a premium rate for premium hours worked.

Effective Dates

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. The rate listed is valid until the next effective rate change or until the new annual determination which takes effect on July 1 of each year. All contractors and subcontractors are required to pay the current prevailing rates of wages and supplements. If you have any questions please contact the Bureau of Public Work or visit the New York State Department of Labor website (www.labor.state.ny.us) for current wage rate information.

Apprentice Training Ratios

The following are the allowable ratios of registered Apprentices to Journey-workers.

For example, the ratio 1:1,1:3 indicates the allowable initial ratio is one Apprentice to one Journeyworker. The Journeyworker must be in place on the project before an Apprentice is allowed. Then three additional Journeyworkers are needed before a second Apprentice is allowed. The last ratio repeats indefinitely. Therefore, three more Journeyworkers must be present before a third Apprentice can be hired, and so on.

Please call Apprentice Training Central Office at (518) 457-6820 if you have any questions.

Title (Trade)	Ratio
Boilermaker (Construction)	1:1,1:4
Boilermaker (Shop)	1:1,1:3
Carpenter (Bldg.,H&H, Pile Driver/Dockbuilder)	1:1,1:4
Carpenter (Residential)	1:1,1:3
Electrical (Outside) Lineman	1:1,1:2

Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:3
Iron Worker	1:1,1:4
Laborer	1:1,1:3
Mason	1:1,1:4
Millwright	1:1,1:4
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3
Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor Bureau of Public Work State Office Campus, Bldg. 12 Albany, NY 12240

District Office Locations:	Telephone #	FAX#
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-775-3568	212-775-3579
Bureau of Public Work - Patchogue	631-687-4883	631-687-4904
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

Cortland County General Construction

Asbestos Worker 02/01/2011

JOB DESCRIPTION Asbestos Worker

DISTRICT 9

ENTIRE COUNTIES

Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Cortland, Erie, Genesee, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates

WAGES

Per hour

07/01/2010-11/30/2010

Asbestos Worker Removal &

Abatement Only \$ 17.50 plus additional \$3.00*

Only for the removal of insulation materials from mechanical systems which are not going to be scrapped.

* Increase to be allocated at a later date

SUPPLEMENTAL BENEFITS

Per hour paid

Journeyman \$ 7.50

OVERTIME PAY

See (B, E, *Q, **T, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (2, 4, 6, 25) on HOLIDAY PAGE

*Code Q applies to 4, 6, & 25

**Code T applies to 2

9-12a - Removal Only

Boilermaker 02/01/2011

JOB DESCRIPTION Boilermaker

DISTRICT 6

ENTIRE COUNTIES

Cayuga, Clinton, Cortland, Franklin, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence, Tompkins

WAGES

Per hour: 07/01/2010

Boilermaker \$ 28.71

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyman \$ 19.03

*IMPORTANT NOTE(Portion of Supplemental benefits per hour paid at same premium as shown for overtime.)

Journeyman \$ 18.24*

OVERTIME PAY

New Work: See (B,E,Q) on OVERTIME PAGE. Time & 1/2 for the 9th & 10th hours Monday thru Saturday, double all addtl. hours Maintenance: See (B,E,Q) on OVERTIME PAGE.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 10, 11, 15) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

(1/2) year terms at the following percentage of Journeyman's wage.

07/01/2010 1st 2nd 3rd 4th 5th 6th 7th 8th

Supplemental Benefits per hour: Six month terms at the following dollar amounts: Six month terms at th	Last Published on Feb 01 201	1					PRC Number	r 2010008096	Cortland Count
Supplemental Benefits per hour: Six month terms at the following dollar amounts: 07/01/2010 1st 2nd 3rd 4th 5th 6th 7th 8th 15.09 \$15.09 \$15.66 \$16.21 \$16.77 \$17.35 \$17.91 \$18.47 *IMPORTANT NOTE (Portion of Supplemental benefits per hour paid at same premium as shown for overtime.) 07/01/2010 1st 2nd 3rd 4th 5th 6th 7th 8th		65%	65%	70%	75%	80%	85%	90%	95%
Six month terms at the following dollar amounts: 1st 2nd 3rd 4th 5th 6th 7th 8th 915.09 \$15.09 \$15.66 \$16.21 \$16.77 \$17.35 \$17.91 \$18.47 *IMPORTANT NOTE (Portion of Supplemental benefits per hour paid at same premium as shown for overtime.) 07/01/2010 1st 2nd 3rd 4th 5th 6th 7th 8th		\$18.67	\$18.67	\$20.10	\$21.54	\$22.97	\$24.41	\$25.84	\$27.28
1st 2nd 3rd 4th 5th 6th 7th 8th 97/01/2010 \$15.09 \$15.09 \$15.66 \$16.21 \$16.77 \$17.35 \$17.91 \$18.47 \$107/01/2010 \$15.09 \$15.09 \$15.66 \$16.21 \$16.77 \$17.35 \$17.91 \$18.47	Supplemental Benefits per	hour:							
07/01/2010 \$15.09 \$15.09 \$15.66 \$16.21 \$16.77 \$17.35 \$17.91 \$18.47 *IMPORTANT NOTE (Portion of Supplemental benefits per hour paid at same premium as shown for overtime.) 07/01/2010 1st 2nd 3rd 4th 5th 6th 7th 8th	Six month terms at the follo	wing dollar am	ounts:						
07/01/2010 1st 2nd 3rd 4th 5th 6th 7th 8th	07/01/2010								
	*IMPORTANT NOTE (Portion	on of Supplem	ental benefits	per hour paid a	at same premi	um as shown	for overtime.)		
	07/01/2010								

6-175

Carpenter - Building 02/01/2011

JOB DESCRIPTION Carpenter - Building **DISTRICT** 6

ENTIRE COUNTIESCortland, Schuyler, Tompkins

WAGES

07/01/2010 Per hour:

Building:

\$ 24.61 Carpenter Floor, Carpet layer 24.61 Dry-wall applicator 24.61 Lather 24.61 Hazardous Waste Work 24.61 Welder 24.61 27.07 Piledriver (Bldg)

BUILDING WORK IS DEFINED AS ALL WORK DONE WITHIN THE BUILDING PROPER.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 16.08

OVERTIME PAY

See (B, E^*, Q) on OVERTIME PAGE *Double time after 8 hours on Saturday.

HOLIDAY

See (1) on HOLIDAY PAGE Paid: See (5, 6) on HOLIDAY PAGE Overtime:

REGISTERED APPRENTICES

WAGES: (1) year terms at the following percentage of Journeyman's wage.

1st 2nd 3rd 4th 80% 50% 70% 60%

SUPPLEMENTAL BENEFITS per hour worked:

\$ 16.08

6-281 Ithaca

JOB DESCRIPTION Carpenter - Building / Heavy&Highway

DISTRICT 1

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Wages per hour:

O7/01/2010 05/01/2011
Carpenter - ONLY for Artificial Turf/Synthetic An Additional Sport Surface Installer \$26.00 \$1.50**

Note - Does not include the operation of equipment. Please see Operating Engineers rates.

SUPPLEMENTAL BENEFITS

Per hour Paid:

07/01/2010

Journeyman \$ 16.94

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (2, 17, 27) on HOLIDAY PAGE Overtime: See (6, 16, 27) on HOLIDAY PAGE

Note: When a holiday falls upon a Saturday, it shall be observed on the preceding Friday. Whan a holiday falls upon a Sunday, it shall be

observed on the following Monday.

REGISTERED APPRENTICESWages per hour:

One year terms at the following percentage of Journeyman's wage:

1st 2nd 3rd 4th 50% 60% 70% 80%

Supplemental Benefits per hour paid:

07/01/2010

Carpenter

 1st year term
 \$ 8.44

 2nd year term
 13.54

 3rd year term
 14.39

 4th year term
 15.24

1-42AtSS

Carpenter - Heavy&Highway

02/01/2011

JOB DESCRIPTION Carpenter - Heavy&Highway

ENTIRE COUNTIES

Cortland, Schuyler, Tompkins

WAGES

 Per hour:
 07/01/2010

 Carpenter/Piledriver
 \$ 26.69

 Certified Welder
 28.19

 Diver - Wet Day
 60.00

 Diver - Dry Day
 27.69

 Tender
 27.69

 Hazardous work
 27.69*

*When an employee performs work on a hazardous waste site, that is State and/or Federally designated as such, and where relevant State and/or Federal regulations require employees to be furnished and those employees use or wear required forms of personal protection.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 15.99

^{**} To be allocated at a later date

OVERTIME PAY

See (B, E*, Q) on OVERTIME PAGE.

HOLIDAY

Paid: See (2, 17) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: (1) year terms at the following percentage of journeyman's wage.

1st 2nd 3rd 4th 50% 60% 70% 80%

SUPPLEMENTAL BENEFITS per hour worked:

All Apprentices \$ 15.99

6-281-Ithaca

Electrician 02/01/2011

JOB DESCRIPTION Electrician

DISTRICT 6

ENTIRE COUNTIES

Cortland, Herkimer, Madison, Oneida, Oswego

PARTIAL COUNTIES

Cayuga: Townships of Ira, Locke, Sempronius, Sterling, Summerhill and Victory. Chenango: Only the Townships of Columbus, New Berlin and Sherburne.

Onondaga: Entire County except Townships of Elbridge and Skaneateles.

Otsego: Only the Townships of Plainfield, Richfield, Springfield, Cherry Hill, Roseboom, Middlefield, Otsego, Exeter, Edmeston, Burlington,

Pittsfield and New Lebanon.

Tompkins: Only the Township of Groton.

Wayne: Only the Townships of Huron, Wolcott, Rose and Butler.

WAGES

Per hour: 07/01/2010

Electrician \$30.00 Cable Splicer 30.00 Teladata 30.00

NOTE:

- (A) THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF EIGHT
- (8) HOURS FOR AT LEAST FIVE (5) DAYS DURATION WHICH MAY BE WORKED. WHEN TWO (2) SHIFTS OR THREE
- (3) SHIFTS ARE WORKED:

 1st shift
 7:00 AM to 3:30 PM

 2nd shift
 3:30 PM to 12:00 Midnight

 3rd shift
 12:00 Midnight to 8:30 AM

07/01/2010 \$ 30.00

 1st shift
 \$ 30.00

 2nd shift
 34.50

 3rd shift
 37.50

(B) OCCUPIED CONDITIONS: WHEN NECESSARY TO PERFORM ALTERATION AND/OR RENOVATION WORK AND OWNER MANDATES (DUE TO OCCUPIED CONDITIONS) PREVENT THE WORK FROM BEING PERFORMED DURING "NORMAL" WORKING HOURS (DEFINED AS BETWEEN 7:00 AM AND 5:30 PM MONDAY THROUGH FRIDAY), ALTERNATE HOURS MAY BE WORKED PROVIDED: 1) THE HOURS ARE ESTABLISHED FOR A MINIMUM OF FIVE (5) DAYS DURATION OR THE LENGTH OF THE JOB WHICHEVER IS SHORTER; AND 2) AN ENTIRE WORK SCOPE WITHIN A JOBSITE AREA IS PERFORMED UTILIZING THE VARIED HOURS.IF THESE CONDITIONS ARE SATSFIED, HOURS WORKED MONDAY THROUGH FRIDAY OUTSIDE OF THE "NORMAL" HOURS SHALL BE PAID AT THE APPROPRIATE DAY SHIFT RATE PLUS FIFTEEN PERCENT (15%). HOWEVER, THE FOLLOWING RESTRICTIONS SHALL APPLY:

1) "ALTERNATE" HOURS SHALL CONSIST OF A MINIMUM OF EIGHT CONSECUTIVE HOURS PER DAY 2) HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY, MONDAY THROUGH FRIDAY, SHALL BE PAID AT A RATE OF ONE AND ONE-HALF TIMES THE APPLICABLE RATE (DAY-SHIFT + 15%)

3) HOURS WORKED ON SATURDAY SHALL BE PAID AT TIME AND ONE-HALF THE APPLICABLE RATE.

4) HOURS WORKED ON A SUNDAY AND HOLIDAYS SHALL BE PAID AT DOUBLE THE STRAIGHT TIME RATE.

5) IF MULTIPLE SHIFTS ARE WORKED ON THE SAME PROJECT, RATES OF PAY SHALL BE DETERMINED BY NOTE "A" ABOVE

6) WORK OF A NEW CONSTRUCTION NATURE MAY NOT BE WORKED UNDER THESE CONDITIONS.

** IMPORTANT NOTICE - EFFECTIVE 04/01/2009 **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30R; additionally, there must be a dispensation of hours in place on the project.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 17.67 plus

*3% of hourly wage paid

OVERTIME PAY

See (B,E*,Q) on OVERTIME PAGE * Double Time after 10 hrs. on Saturday.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

(at the following percentage of journeyman's wage)

 1st Period (0-1000 hrs)
 40%
 4th Period (3501-5000 hrs)
 60%

 2nd Period (1001-2000 hrs)
 45%
 5th Period (5001-6500 hrs)
 70%

 3rd Period (2001-3500 hrs)
 50%
 6th Period (6501-8000 hrs)
 80%

Supplemental Benefits per hour worked:

Apprentices:

1st period \$ 9.39 plus 4th period \$16.79 plus

*3% of hourly wage paid *3% of hourly wage paid

2nd period \$9.39 plus 5th period \$17.01 plus

*3% of hourly wage paid *3% of hourly wage paid

3rd period \$16.57 plus 6th period \$17.23 plus

*3% of hourly wage paid *3% of hourly wage paid

*NOTE: The 3% is based on the hourly wage paid, straight time rate or premium rate.

6-43

Elevator Constructor 02/01/2011

JOB DESCRIPTION Elevator Constructor

DISTRICT 6

ENTIRE COUNTIES

Broome, Cayuga, Chenango, Cortland, Franklin, Jefferson, Lewis, Onondaga, Oswego, St. Lawrence, Tioga, Tompkins

PARTIAL COUNTIES

Delaware: Only the towns of: Tompkins, Walton, Masonville, Sidney, Franklin and Deposit.

Madison: Only the towns of: Chittenango, Fenner, Cazenovia, Nelson, Eaton, Georgetown, Lenox, Deruyter, Lebenon and Sullivan. Oneida: Only the towns of: Florence, Camden and Vienna.

WAGES

Per hour: 07/01/2010

Elevator Constructor \$ 38.16 Helper 26.71

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday, except work on general repairs and modernization.

^{**} IMPORTANT NOTICE - EFFECTIVE 04/01/2009 **

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30R; additionally, there must be a dispensation of hours in place on the project.

SUPPLEMENTAL BENEFITS

Per hour worked:

\$ 20.07

plus 6% of wage (under 5 years service) plus 8% of wage (after 5 years service)

OVERTIME PAY

See (D, O, T) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 15, 16) on HOLIDAY PAGE Overtime: See (5, 6, 15, 16) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: (1) year terms at the following percentage of journeyman's wage.

55% 65% 70% 80% \$ 20.99 \$ 24.80 \$ 26.71 \$ 30.53

SUPPLEMENTAL BENEFITS: Same as journeymen above

6-62.1

Glazier 02/01/2011

JOB DESCRIPTION Glazier DISTRICT 5

ENTIRE COUNTIES

Cayuga, Cortland, Herkimer, Madison, Oneida, Onondaga, Oswego

WAGES

Per Hour: 07/01/2010 05/01/2011 05/01/2012

Additional Additional

Glazier \$ 22.00 \$ 1.25 \$ 1.45

Additional \$.50 per hour for all swing stagework, belt work, open steel or scaffolding over 25' or more from ground, floor or roof levels.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 11.99

OVERTIME PAY

See (B,E*,E2,Q**) on OVERTIME PAGE.

* Double time before 8:00am and after 6:30pm on Saturday.

**Note: Emergency work on Sunday is 1 1/2 times the hourly rate.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

1000 hour terms at the following percentage of journeyman's wage.

1st. 2nd. 3rd. 4th. 5th. 6th. 7th. 8th. 90% 50% 55% 60% 65% 70% 75% 80%

Supplemental Benefits per hour worked:

 Appr. 1st & 2nd term
 \$ 9.34

 Appr. 3rd term
 10.93

 Appr. 4th term
 11.06

Prevailing Wage Rates for 07/01/2010 - 06/30/2011 Last Published on Feb 01 2011

Appr. 5th term	11.20
Appr. 6th term	11.33
Appr. 7th term	11.46
Appr. 8th term	11.73

5-677.Z-2

Insulator - Heat & Frost 02/01/2011

JOB DESCRIPTION Insulator - Heat & Frost

DISTRICT 6

ENTIRE COUNTIES

Broome, Cayuga, Chemung, Chenango, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Tioga, Tompkins

WAGES

Per hour: 07/01/2010

Insulation Installer \$ 29.05

(On mechanical systems only)

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS WORKED BETWEEN THE HOURS LISTED BELOW:

07/01/2010

 1ST SHIFT (MORNING) 7-3
 \$ 29.05

 2ND SHIFT (AFTERNOON) 3-11
 33.41

 3RD SHIFT (NIGHT) 11-7
 36.31

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30R; additionally, there must be a dispensation of hours in place on the project.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 15.73

OVERTIME PAY

See (B1, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime See (4,6) on HOLIDAY PAGE. Also Easter.

Triple time for Labor Day if worked.

REGISTERED APPRENTICES

WAGES: (1) yr terms at the following percentage of Journeyman's wage

 1st
 2nd
 3rd
 4th

 50%
 60%
 70%
 80%

 \$14.52
 \$17.43
 \$20.34
 \$23.24

SUPPLEMENTAL BENEFITS per hour worked:

\$15.73

6-30-Syracuse

Ironworker 02/01/2011

JOB DESCRIPTION Ironworker

DISTRICT 6

ENTIRE COUNTIES

Broome, Cayuga, Cortland, Onondaga, Oswego, Seneca, Tioga, Tompkins

PARTIAL COUNTIES

^{**} IMPORTANT NOTICE - EFFECTIVE 04/01/2009 **

Chenango: Only the Townships of Lincklaen, Otselic, Pitcher, Pharsalia, German, McDonough, Preston, Norwich, Smithville, Oxford, Guilford, Greene, Coventry, Bainbridge and Afton.

Jefferson: Only the Townships of Alexandria, Theresa, Clayton, Orleans Cape, Vincent, Lyme, Brownville, Pamelia, Leray, Hounsfield, Watertown, Rutland, Adams, Henderson, Rodman, Ellisburg, Lorraine and Worth.

Madison: Only the Townships of Sullivan, Lenox, Lincoln, Fenner, Smithfield, Cazenovia, Nelson, DeRuyter and Georgetown.

Schuyler: Only the Townships of Cayuta, Catherine, Hector and Montour.

Wayne: Only the Townships of Galen, Savannah, Rose, Butler, Huron and Wolcott

WAGES

Per hour:	07/01/2010	01/01/2011	05/01/2011
Structural/Reinf/Rebar	\$ 25.75	\$ 26.25	additional
Mach Mover & Rigger	25.75	26.25	\$ 1.50
Ornamental & Curtain			
Wall, Window Wall	25.75	26.25	
Pre-glazed metal framed windows attached			
to steel or masonry, caulking	25.75	26.25	
Fence Erector (Chain Link/Security)	25.75	26.25	
Sheeter/Bridge rail	25.75	26.25	
Pre-Cast erector	25.75	26.25	
Stone Derrickman	25.75	26.25	
Pre-Engineered Bldg Erector	25.75	26.25	

*NOTE: Shift work may be performed when mandated by the owner. All shifts will be (8) hours with start times beginning between the hours listed below.

1st Shift (6:00am - 8:00am)	25.75	26.25
2nd Shift (2:30pm - 4:30pm)	Plus 10%	Plus 10%
3rd Shift (11:00pm - 1:00am)	Plus 15%	Plus 15%

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeymen \$ 18.90 \$ 19.40

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

See (1) on HOLIDAY PAGE Paid: Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: (1) year terms at the following rates.

2nd 3rd 4th 1st \$15.00 \$17.00 \$19.00 \$21.00

SUPPLEMENTAL BENEFITS per hour worked:

	07/01/2010	01/01/2011
1st year	\$ 9.10	\$ 9.10
2nd year	15.19	15.19
3rd year	16.06	16.06
4th year	16.93	16.93

6-60

Laborer - Building 02/01/2011

JOB DESCRIPTION Laborer - Building

DISTRICT 6

ENTIRE COUNTIES Cortland, Tompkins

PARTIAL COUNTIES

Schuyler: Only the Township of Catherine including the village of Odessa.

Tioga: Townships of Candor & Spencer

WAGES

If a prime contract is let for site work only, meaning no primary buildings are involved in their site contract, the heavy/highway rates would be applicable.

When a prime contract is let for site work and building excavation is part of that contract, the building rates would be applicable.

GROUP #1: Basic laborer, Dormitory Renovation

GROUP #2: Pneumatic Tools.

GROUP #3: Blaster, Asbestos/Toxic Waste Work

WAGES per hour:

07/01/2010

Building Laborer:

GROUP #1 \$ 21.88 GROUP #2 22.18 GROUP #3 22.88

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 14.40

OVERTIME PAY

See (B, *E, Q) on OVERTIME PAGE *Double time after 8 hours on Saturday

HOLIDAY

See (1) on HOLIDAY PAGE Paid: Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: (1000 hr) terms at the following percentage of Journeyman's wage.

2nd 4th 5th 1st 3rd 100% 70% 80% 85% 90%

SUPPLEMENTAL BENEFITS per hour worked:

1st term	0-1000 hrs	\$ 10.65
2nd term	1001-2000 hrs	11.15
3rd term	2001-3000 hrs	11.65
4th term	3001-4000 hrs	12.15
5th term	over 4000 hrs	14.40
	2nd term 3rd term 4th term	2nd term 1001-2000 hrs 3rd term 2001-3000 hrs 4th term 3001-4000 hrs

6-785b

Laborer - Heavy&Highway

02/01/2011

DISTRICT 6

JOB DESCRIPTION Laborer - Heavy&Highway

ENTIRE COUNTIES Cortland, Tompkins

PARTIAL COUNTIES

Schuyler: Only the Township of Catherine including the village of Odessa.

Tioga: Townships of Candor & Spencer

WAGES

GROUP A: Basic, Drill Helper, Flagman, Outboard and Hand Boats.

GROUP B: Bull Float (where used for strike off only), Chain Saw, Conc. Aggregate Bin, Concrete Bootmen, Gin Buggy, Hand or Machine Vibrator, Jack Hammer, Mason Tender, Mortar Mixer, Pavement Breaker, Handlers of all Steel Mesh, Small Generators for Laborers' Tools, Installation of Bridge Drainage Pipe, Pipe Layers, Vibrator Type Rollers, Tamper, Drill Doctor, Tail or Screw Operator on Asphalt Paver, Water Pump Operators(1-1/2" & Single Diaphragm), Nozzle (Asphalt, Gunite, Seeding, and Sand Blasting), Laborers on Chain Link Fence Erection, Rock Splitter and Power Unit, Pusher Type Concrete Saw and all other Gas, Electric, Oil and Air Tool Operators, Wrecking Laborer.

GROUP C: Drilling equipment - only where a separate air compressor unit supplies power, Acetylene Torch Operators, Asphalt Raker and Powderman.

GROUP D: Blasters, Form Setters (slab steel forms on highways, roads, streets & airport runways), Stone or Granite Curb Setters.

NOTE *** Hazardous Waste removal on a State or Federal designated waste site where relevant state or federal regulations require employees to wear personal protection, Additional \$2.00/HR over Group A rate.

Wages per hour:

O7/01/2010
Heavy/Highway Laborer:
GROUP A \$ 23.91
GROUP B 24.11
GROUP C 24.31
GROUP D 24.51

NOTE: All night work mandated by DOT shall be paid an additional \$ 1.75 per hr. over Group A rate.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 14.40

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: (1000 hr) terms at the following percentage of Journeyman's wage:

1st 2nd 3rd 4th 5th 60% 70% 80% 90% 100%

SUPPLEMENTAL BENEFITS per hour worked:

Apprentice	1st term	0 - 1000 HRS	\$ 10.65
Apprentice	2nd term	1001-2000 HRS	11.15
Apprentice	3rd term	2001-3000 HRS	11.65
Apprentice	4th term	3001-4000 HRS	12.15
Apprentice	5th term	over 4000 HRS	14.40

6-785h

Lineman Electrician 02/01/2011

JOB DESCRIPTION Lineman Electrician

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Per hour:

Includes Teledata Work within Ten feet of High Voltage Transmission Lines

	07/01/2010	05/02/2011	05/07/2012
Lineman/Tech./Welder	\$ 43.82	\$ 44.52	\$45.23
Cable splicer	43.82	44.52	45.23
Digging Machine Operator	39.44	40.07	40.71
Tractor Trailer Driver	37.25	37.84	38.45
Groundman/Truck Driver	35.06	35.62	36.18
Mechanic 1st Class	35.06	35.62	36.18
Flagman	26.29	26.71	27.14

Additional 1.00 per hr.for entire crew when a helicopter is used.

Above rates applicable on all overhead Transmission line work & Fiber Optic Cable where other construction trades are or have been involved. This applies to transmission line work only, not other construction.

Lineman/Technician/Welder	\$ 42.61	\$ 43.31	\$ 44.01
Digging Machine Operator	38.35	38.98	39.61
Tractor Trailer Driver	36.22	36.81	37.41
Groundman/Truck Driver	34.09	34.65	35.21
Mech. 1st Class	34.09	34.65	35.21
Flagman	25.57	25.99	26.41
Certified WelderPipe Type Cable	44.74	45.48	46.21
Cable Splicer pipe type cable	46.87	47.64	48.41

Additional 1.00 per hour for entire crew when a helicopter job.

Above rates apply on Switching Structures, Maintenance projects, Railroad Catenary install/maint, Third rail installation, Bonding of Rails and pipe type cable and installation of Fiber Optic Cable.

Lineman /Techician	\$ 41.32	\$ 42.02	\$ 42.72
Welder/Cable Splicer	41.32	42.02	42.72
Digging Machine Operator	37.19	37.82	38.45
Tractor Trailer Driver	35.12	35.72	36.31
Groundman/Truck Driver	33.06	33.62	34.18
Mechanic 1st Class	33.06	33.62	34.18
Flagman	24.79	25.21	25.63

Additional 1.00 per.hr.for entire crew when a helicopter is used.

Above rates applicable on all overhead and underground distribution and maintenance work, and all overhead and underground transmission line work and the installation of Fiber Optic Cable where no other construction trades are or have been involved.

Lineman/Technician	\$ 41.32	\$ 42.02	\$ 42.72
Cable Splicer pipe type cable	45.45	46.22	46.99
Certified Welder pipe type	43.39	44.12	44.86
Digging Machine Operator	37.19	37.82	38.45
Tractor Trailer Driver	35.12	35.72	36.31
Mechanic 1st Class	33.06	33.62	34.18
Groundman/Truck Driver	33.06	33.62	34.18
Flagman	24.79	25.21	25.63

Additional \$ 1.00 per hour for entire crew when a helicopter is used.

Above rates applicable on all electrical sub-stations, switching structures, fiber optic cable and all other work not defined as "Utility outside electrical work"

** IMPORTANT NOTICE - EFFECTIVE 04/01/2009 **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30R; additionally, there must be a dispensation of hours in place on the project.

SUPPLEMENTAL BENEFITS

Per hour worked including holidays listed below:

The following SUPPLEMENTAL benefits apply to all classification categories of CONSTRUCTION, TRANSMISSION and DISTRIBUTION.

\$ 15.00	\$ 16.50	\$ 18.25
*plus 7% of	*plus 7% of	*plus 7% of
hourly wage paid	hourly wage paid	hourly wage paid

OVERTIME PAY

See (B, E, Q,) on OVERTIME PAGE. Double time for all emergency work designated by the Dept. of Jurisdiction.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1st shift 8:00 AM to 4:30 PM REGULAR RATE

2nd shift 4:30 PM to 1:00 AM REGULAR RATE PLUS 17.3 %

3rd shift 12:30 AM to 9:00 AM REGULAR RATE PLUS 31.4 %

HOLIDAY

Paid See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Gov. of NYS Election Day.

Overtime See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Gov. of NYS Election Day.

SUPPLEMENTS for holidays paid at straight time

REGISTERED APPRENTICES

(1000) hr terms at the following percentage of Journeyman's wage.

1st 2nd 3rd 4th 5th 6th 7th 60% 65% 70% 75% 80% 85% 90%

Supplemental Benefits per hour worked:

The following SUPPLEMENTAL benefits apply to all classification categories of CONSTRUCTION, TRANSMISSION and DISTRIBUTION.

\$ 15.00 \$ 16.50 \$ 18.25 *plus 7% of *plus 7% of *plus 7% of hourly wage paid hourly wage paid

6-1249a

Lineman Electrician - Teledata

02/01/2011

JOB DESCRIPTION Lineman Electrician - Teledata

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour:

FOR WORK OUTSIDE BUILDING PROPERTY LINES.

	07/01/2010	01/01/2011
Cable Splicer	\$ 26.64	\$ 27.44
Installer/Repairman	25.29	26.05
Teledata Lineman	25.29	26.05
Technician/Equip Oper	25.29	26.05
Groundman	13.40	13.81

NOTE: EXCLUDES Teledata work within ten feet of High Voltage (600 volts and over) transmission lines. For this work please see LINEMAN.

SUPPLEMENTAL BENEFITS

Per hour worked:

\$ 4.43 \$ 4.43 *plus 3% of hourly *plus 3% of hourly wage paid wage paid

*NOTE: The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 16) on HOLIDAY PAGE

6-1249LT - Teledata

^{*}NOTE: The 7% is based on the hourly wage paid, straight time rate or premium rate.

JOB DESCRIPTION Lineman Electrician - Traffic Signal Lighting

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Per hour:

07/01/2010	05/02/2011	05/07/2012
\$37.54	\$38.02	\$38.25
39.42	39.92	40.16
33.79	34.22	34.43
31.91	32.32	32.51
30.03	30.42	30.60
30.03	30.42	30.60
22.52	22.81	22.95
	\$37.54 39.42 33.79 31.91 30.03 30.03	\$37.54 \$38.02 39.42 39.92 33.79 34.22 31.91 32.32 30.03 30.42 30.03 30.42

Above rates applicable on all Lighting and Traffic Signal Systems with the installation, testing, operation, maintenance and repair of all traffic control and illumination projects, traffic monitoring systems, road weather information systems and the installation of Fiber Optic Cable.

SUPPLEMENTAL BENEFITS

Per hour worked:

All classifications \$ 15.00 \$16.50 \$18.25 *plus 6.5% of *plus 6.5% of *plus 6.5% of hourly wage paid hourly wage paid hourly wage paid

NOTE: Additional \$1.00 per hr. for entire crew when a helicopter is used.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

NOTE: DOUBLE TIME FOR ALL EMERGENCY WORK DESIGNATED BY THE DEPT. OF JURISDICTION.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT 8:00 AM TO 4:30 PM REGULAR RATE

2ND SHIFT 4:30 PM TO 1:00 AM REGULAR RATE PLUS 17.3% 3RD SHIFT 12:30 AM TO 9:00 AM REGULAR RATE PLUS 31.4%

HOLIDAY

Paid See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Gov of NYS Election Day.

Overtime See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Gov of NYS Election Day.

REGISTERED APPRENTICES

WAGES: (1000) hour terms at the following percentage of Journeymans Wage.

1st 2nd 3rd 4th 5th 6th 7th 60% 65% 70% 75% 80% 85% 90%

SUPPLEMENTAL BENEFITS: Same as Journeyman/Technician.

6-1249a-LT

Lineman Electrician - Tree Trimmer

02/01/2011

DISTRICT 6

JOB DESCRIPTION Lineman Electrician - Tree Trimmer

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Per hour:

Applies to line clearance, tree work and right-of-way preparation on all new or existing energized overhead or underground electrical, telephone and CATV lines. This also would include stump removal near underground energized electrical lines, including telephone and CATV lines.

^{*}NOTE: The 6.5% is based on the hourly wage paid, straight time rate or premium rate.

	07/01/2010	01/02/2011	01/01/2012
Tree trimmer Equip Operator	\$ 21.22 18.72	\$ 21.64 19.09	\$ 22.08 19.48
Mechanic	18.72	19.09	19.48
Truck Driver Ground person	15.82 12.99	16.14 13.25	16.46 13.51
Flag person SUPPLEMENTAL BENEFITS	9.25	9.44	9.62
Per hour worked:			
	\$ 6.84 *plus 3% of hourly wage paid	\$ 7.36 *plus 3% of hourly wage paid	\$ 7.88 *plus 3% of hourly wage paid

Supplements paid at STRAIGHT TIME rate for holidays.

*NOTE: The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 8, 15, 16, 25) on HOLIDAY PAGE Overtime: See (5, 6, 8, 15, 16, 25) on HOLIDAY PAGE

6-1249TT

Mason - Building 02/01/2011

JOB DESCRIPTION Mason - Building DISTRICT 5

ENTIRE COUNTIES

Cortland, Tompkins

WAGES

Per hour: 07/01/2010		07/01/2011 Additional	
Brick/Block Layer	\$ 26.53	\$ 1.25	
Cement/Stone Mason	26.53	1.25	
Plasterer/EFIS	26.53	1.25	
Tuck Pointer	26.53	1.25	

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 15.95

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

See Above

REGISTERED APPRENTICES

Wage per hour:

(1) year terms at the following percentage of Journeyman's wage.

1st 2nd 3rd 4th 55% 70% 80% 90%

Supplemental Benefits per hour worked.

All terms \$ 15.95

5-3B Ith - Z2

Mason - Heavy&Highway 02/01/2011

JOB DESCRIPTION Mason - Heavy&Highway

DISTRICT 5

ENTIRE COUNTIES

Allegany, Broome, Chautauqua, Chemung, Chenango, Cortland, Delaware, Genesee, Livingston, Monroe, Ontario, Orleans, Otsego, Schuyler, Seneca, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates

PARTIAL COUNTIES

Cattaraugus: Entire county except in the Townships of Perrysburg and the Village of Gowanda only the Bricklayer classification applies.

Erie: Only the Bricklayer classification applies. Niagara: Only the Bricklayer classification applies.

WAGES

 Per hour:
 07/01/2010
 07/01/2011 O7/01/2011 Additional
 07/01/2012 Additional

 Cement Mason
 \$ 28.22
 \$ 1.90
 \$ 2.00

 Bricklayer
 28.22
 1.90
 2.00

Add \$1.00 per hour for work from swing stage or swing scaffold, including rolling scaffold suspended from bridges.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 17.24

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

750 hour terms at the following percentage of Journeyman's wage:

2nd 4th 5th 6th 7th 8th 1st 3rd 70% 80% 90% 55% 60% 65% 75% 85%

Supplemental benefits per hour worked:

All terms \$ 17.24

5-3h

Mason - Tile Finisher 02/01/2011

JOB DESCRIPTION Mason - Tile Finisher

DISTRICT 5

ENTIRE COUNTIES

Allegany, Broome, Chautauqua, Chemung, Chenango, Cortland, Delaware, Otsego, Schuyler, Steuben, Tioga, Tompkins

PARTIAL COUNTIES

Cattaraugus: With the exception of the Township of Perrysburg and the Village of Gowanda.

WAGES

Per hour

 Building:
 07/01/2010
 07/01/2011

 Additional

 Tile Finisher
 \$ 23.30
 \$ 1.25

 Marble, Slate, Terrazzo and Tile

 Mason finisher
 23.30
 1.25

SUPPLEMENTAL BENEFITS

Per hour worked: \$11.46

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

See (1) on HOLIDAY PAGE Paid: Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

1st and 2nd term 1200 hours and 3rd term 1300 hours at the following percentage of rate.

2nd 3rd 1st 55% 60% 80%

Supplemental Benefits:

\$8.37 \$8.40 \$10.32

5-3TF - Z2

5-3TS - Z2

Mason - Tile Setter 02/01/2011

JOB DESCRIPTION Mason - Tile Setter

DISTRICT 5

DISTRICT 6

ENTIRE COUNTIES

Allegany, Broome, Chautauqua, Chemung, Chenango, Cortland, Delaware, Otsego, Schuyler, Steuben, Tioga, Tompkins

PARTIAL COUNTIES

Cattaraugus: With the exception of the Township of Perrysburg and the Village of Gowanda.

WAGES

07/01/2010 07/01/2011 Per hour:

Additional

Tile Setter: \$ 26.73 \$ 1.25

Marble, Slate, Terrazzo and Tile

SUPPLEMENTAL BENEFITS

Per hour worked: \$12.47

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

See (1) on HOLIDAY PAGE See (5, 6) on HOLIDAY PAGE Paid: Overtime:

REGISTERED APPRENTICES

(1) year terms at the following percentage of joureyman's rate.

Terms 1st 2nd 3rd 4th 70% 90% 55% 80%

Supplemental Benefits per hour worked:

4th **Terms** 1st. 2nd 3rd

> \$8.48 \$8.61 \$ 12.29 \$ 12.38

02/01/2011 Millwright

JOB DESCRIPTION Millwright

ENTIRE COUNTIES

Cortland, Schuyler, Tompkins

WAGES

Per hour: 07/01/2010 Journeyman\$ 26.70Welder27.95Hazardous Waste Work27.95

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 16.13

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

***NOTE: Saturday may be used as a make-up day and worked at the straight time rate of pay during a work week when conditions such as weather, power failure, fire or natural disaster prevent the performance of work on a regularly scheduled work day. If a make-up day is utilized, a minimun of eight hours must be scheduled.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following percentage of Journeyman's wage.

1st 2nd 3rd 4th 60% 70% 80% 90%

Supplemental Benefits per hour worked:

 Appr 60%
 \$ 7.46

 Appr 70%
 13.529

 Appr 80%
 14.396

 Appr 90%
 15.263

6-1163 CST

Operating Engineer - Building

02/01/2011

DISTRICT 6

JOB DESCRIPTION Operating Engineer - Building

ENTIRE COUNTIES

Cayuga, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence, Tompkins

WAGES

Per hour:

If a prime contract is let for site work only, meaning no buildings are involved in their site contract, the Heavy/Highway rates would be applicable.

When a prime contract is let for site work and building excavation is part of that contract, the Building rates would be applicable for the Operators classification.

BUILDING:

CLASSIFICATION A

Air Plako

Asphalt & Blacktop Roller

Automated Concrete Spreader

(CMI or Equiv.)

Auto.Fine Grade Machine(CMI)

CLASSIFICATION B

"A" Frame Truck

Back Dumps

Blacktop Plant

(Non-Automatic)

Boring Machine

Backhoe

Barrell Shredder Belt Placer

Blacktop Spreader(such as Barber Greene & Blaw Knox) Blacktop Plant(automated) Blast or Rotary Drill (Truck or cat mounted)

BoomTruck

Burning Plant Operator

Cableway Caisson Auger Bulldozer Cage-Hoist Central Mix Plant(Non-automatic)

Compressor,pump,generator or

welding machine(when used in a battery of not more than five(5)

Concrete Paver

(single drum over 16S)
Core Boring Machine
Drill Riggs-tractor mounted
Elevator--as material hoist

Central Mix Plant (automated)

Concrete Pump

Crane

Crusher-Rock

Derrick

Dewatering Press Diesel Power Unit

Dirt Filter Press Operation Equipment

Dragline Dredge

Dual Drum Paver

Elevating Grader(self propelled or tow)

Elevator Hoist--Two Cage Excavator--all purpose hydraulically operated Fork Lift (Loed/Lull and other

terraine type)

Front End Loader(4 c.y. and over)

Gradall (Power)

Head Tower (Saurman or equal)

Hoist (2 or 3 Drum)
Hydroblaster (Laser Pump)
LCM's Work Boat Operator
Light Plants, Compressors and

Generators Locomotive

Maintenance Engineer Maintenance Welder

Mine Hoist

Mucking Machine or Mole

CLASSIFICATION A (CONTINUED)

Overhead Crane-fixed permanent

Pile Driver

Quarry Master or Equivalent Refrigeration Equipment (for soil

stabilization) Scraper Sea Mule Shovel

Side Boom Slip Form Paver

Straddle Buggy(Ross Carrier,lumber

carrier)

Tractor Drawn Belt Type Loader (Euclid Loader) Trenching Machine (digging capacity of over 4 ft. depth)

Truck Crane, Operator

Truck or Trailer Mounted Log Chipper

(self-feeder)

Tug Operator (Manned,rented equip.excluded)

Tunnel Shovel

Vibro or Sonic Hammer Controls

(when not mounted in proximity to Rig Operator)

CLASSIFICATION C

Compressor (Up to 500 c.f.)

Concrete Paver or Mixer (under 16S)

Concrete Pavement Spreaders & Finishers (not automatic)

Conveyor (over 12 ft)

Electric Submersible Pump (4" and over)

Fine Grade Machine (non-auto)

Fireman

Farm Tractor (with or without

accessories) Fork Lift over 10 ton

(with an with and attacked

(with or without attachments) Front End Loader (under 4 c.y.)

Grout Pump Gunite Machine

High Pressure Boiler(15 lbs & over)

Hoist (one drum)

Hydraulic Breaking Hammer

(Drop Hammer)
Kolman Plant Loader
(screening gravel)
Maintenance Grease Man
Mixer for stabilized base--

Monorail Machine

Parapet Concrete or Pavement Grinder

self propelled (Seaman Mixer)

Parts Man Post Drive

(truck or tractor mounted)

JPost Hole Digger

(truck or tractor mounted)

Power Sweeper (Wayne or Similar)

Pump--Crete or Squeeze Crete Road Widener (front end of Grader or self propelled)

Roller

Self Contained hydraulic bench drill.

Shell Winder (motorized)

CLASSIFICATION B (CONTINUED)

Skid Steer Bobcat type Loader Snorkel (overhead arms) Snowblower control man Tractor (with or without

without accessories)

Trenching Machine (digging capacity of

4 ft. or less) Tugger Hoist

Vacuum Machine (self propelled or

mounted) Vibro Tamp

Well Drill Well Point System

(submersible pumps when used in lieu

of well-point system)

Winch (motor driven)

Winch Cat Winch Truck Fork Lift ("with or without" attachments) 10 ton and under

Form Tamper

Generator (2500 watts & over)

Hydraulic Pump

Mechanical Heaters--More than two (2) mechanical heaters or any mechanical heater or heaters whose combined output exceeds 640,000 BTU per hour. (manufacturer's rating) plus one self contained heating unit, (i.e.Sundog or

Air Heat type, New Holland Hay Dryer type excluded)

Mulching Machine

Oiler

Power Driven Welding Machine - 300 amp.and over (other than all electric). One Welding Machine under 300 amp. will not require an engineer unless in a hattery

Power Heaterman (hay dryer)

Pumps - water & trash

Revinus Widener (road widener)

Single Light Plant Steam Cleaner or Jenny

	07/01/2010	
Building:		
Master Mechanic	\$ 29.26	
Asst.Master Mechanic	28.15	
Class A	27.58	
Class B	25.79	
Class C	22.21	
Pile Dr. w/Bm/Ld 100ft+	29.33	
Tower Crane	29.08	Plus boom length premium.
Crane/Derrick w/boom:		
" 150 ft to 199 ft	Add \$ 1.75	
" 200 ft to 299 ft	Add \$ 2.75	
" 300 ft and over	Add \$ 3.75	

NOTE: THE LENGTH PREMIUM IS IN ADDITION TO THE CRANE TONAGE PREMIUM LISTED BELOW.

ALL CRANES FROM 30 TO 64 TON - CLASS A RATE PLUS \$.50

ALL LATTICE BOOM CRANES 65 TON CAPACITY & OVER - CLASS A RATE PLUS \$ 1.75

ALL HYDRAULIC CRANES 65 TON TO 79 TON CAPACITY - CLASS A RATE PLUS \$ 1.10

ALL HYDRAULIC CRANES 80 TON TO 99 TON CAPACITY - CLASS A RATE PLUS \$ 1.25

ALL HYDRAULIC CRANES 100 TON CAPACITY AND OVER - CLASS A RATE PLUS \$ 1.75

ADDITIONAL \$2.00 per hr. if work requires Level A,B,C of Personal Protective Equipment listed in the Occup. Saf. & Health Guidance Manual for Hazardous Waste Site Activities. Paper dust masks are excluded from coverage in this section.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 20.30

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: (1000)HOUR TERMS AT THE FOLLOWING PERCENTAGE OF JOURNEYMAN'S CLASS A WAGE.

1st	2nd	3rd	4th
60%	65%	70%	80%
\$16.55	17.93	19.31	22.06

SUPPLEMENTAL BENEFITS per hour worked: Same as Journeyman

Operating Engineer - Heavy&Highway

02/01/2011

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 6

ENTIRE COUNTIES

Cayuga, Cortland, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence, Tompkins

PARTIAL COUNTIES

Herkimer: That portion of the county that lies west of a line drawn due north and due south through the railroad station in Little Falls, NY

WAGES

Per hour:

CLASS A: Asphalt Paver 100 h.p. and over(fixed screed 10'width and over), Extend a-mat paver, Automated Concrete Spreader, Automatic Fine Grader, Backhoe (except tractor-mounted, Blacktop Plant (automated) Boom Truck*, Blacktop Roller (10,000 lb and over), Caisson Auger, Central Mix Conc. Plant(automated), Hydraulic crane (over 5 ton capacity), Concrete Curb Machine (Self-propelled, Slipform), Crane, Directional Boring/Drilling Machine and Locator, Derricks, Dragline, Dredge, Excavator (all purpose-hydraulic-Gradall or similar), Front End Loader(4c.y.& over), Head Tower (Sauerman or equal), Hoist (two or three drum), Hydrodemolition Equip (self contained), Maint. Eng, Mine Hoist, Mucking Machine or Mole, Overhead Crane(Gantry or Straddle Type), Pavement Profiler (300 h.p. and over), Pile Driver, Power Grader, Road widener, Scraper, Shovel, Side Boom, Slip Form Paver (If a second man is needed, he shall be an Oiler), Trencher (over 75 h.p.), Truck Crane, Truck or Trailer mounted Chipper (self-feed), Tug Operator (craft over 26'), Tunnel Shovel, Vermeer Saw (over 75 h.p.), Welder.

CLASS B: Asphalt paver under 100 h.p. (under 10 ft width), Automated slope paving machine, Backhoe (Tractor-Mounted), Belt loader, Tractor Drawn Belt Type Loader, Blacktop Plant (non-automated), Blacktop Roller (under 10,000 lb), Blast or Rotary Drill (Truck or Tractor Mounted), Boring Machine, Bridge deck finishing machine, Cage Hoist, Central Mix Plant, (Non Automated), All Concrete Batching Plants, Concrete pump, Hydraulic crane (5 tons & under), Compressors (4 or less exceeding 2,000 c.f.m. combined capacity), Concrete Paver over 16S, Belt Placer, Cableway, Core Drill (skid, trk mtd or track), Crusher, Diesel Pwr Unit, Drill rigs (Trk/Tractor mounted), Fork Lift, F.E.Loader(under 4 cy), Hi-Press Boiler(15 lbs & over), Hoist(One Drum), Hydro Axe, Kolman Plant Loader & similar type loaders (if employer requires another man,he shall be Oiler), L.C.M.Work Boat Oper, Locomotive, Lubrication Eng/Greaseman, Mixer (for stabilized base-self propelled), Pavement Profiler(under 300 h.p.), Plant Engineer, Pump crete, Refrigeration Equipment (for soil stabilization),Roller(above sub grade)under 10,000lb, Sea Mule, Skid Steer Bobcat Type Loader, Self-propelled rubbleizer, Stationary central compressed air plant (5000cfm and up), Telehandler, Tractor with Dozer and/or Pusher, Trencher (under 75 h.p.), Tugger Hoist, Vermeer Saw (ride-on)under 75 h.p., Winch and Winch Cat,Log Skidr,Hydra-spiker(ride on), All ride-on Tie Extractors, Tie Handlers, Tie Inserters, Tie spacers and Track Liners, Drill Rig (Self Contained, Self Propelled or Hydr),Material Handling Knuckle Boom Trk 5 ton & over.

CLASS C: Aggregate Plant, A Frame Truck, Ballast Regulator (ride-on), Boiler(used in conjunction with production), Cement & Bin oper, Compressors (4 under 2,000 cfm combined capacity, or 3 or less with more than 1200 cfm but not to exceed 2,000 c.f.m), Compressors (any size but subject to other provisions for compressors-Dust Collectors, Generators, Pumps, Welding Machines, Concr Paver or Mixer(16s & under), Conc Saw (self propelled), Concrete Pavement Spreaders and Finishers, Conveyor, Drill Locator, Electric Pump Used in Conjunction with Well Point System, Span Saw (Ride on), Farm Tractor with accessories, Form Tamper, Grout Pump, Gunite Machine, Hammers(hydraulic-self propelled), Hydraulic Pump (jacking system), Light plants, Mulching Mach., Oiler, Parapet concrete or pavement grinder, Post Hole Digger & Post Driver, Power Sweeper, Power Heaterman, Roller(grade & fill), Scarifier(ride-on), Shell Winder, Steam cleaner Tamper(ride-on), Submersible Electric Pump (when used in lieu of well point system), Tractor, Material Handling Knuckle Boom Truck (under 5 ton), Vacuum machine (self propelled) Vibratory Compactor, Well point.

SINGLE IRREGULAR WORK SHIFT:

A single irregular work shift can start any time from 5:00 PM to 1:00 AM. All employees who work a single irregular work shift on governmental mandated night work shall be paid an addtl \$2.00 per hour. Sect 10 will be effective for work bid on or after July 1, 2001.

	07/01/2010	07/01/2011
Heavy/Highway:		
Master Mechanic	\$ 30.25	\$ 32.35
CLASS A	28.90	31.00
CLASS B	28.02	30.12
CLASS C	24.74	26.84

PIPELINE: Master mechanic, Class A and Class B rates apply.

NOTE: NO CRANE PREMIUM ON PIPELINE WORK

^{*}All cranes and boom trucks, 49 tons and under, or with boom and jib working length under 115 ft. = Class "A" rate and \$1.00 per hour.

^{*}All cranes and boom trucks 50 tons and over, or with boom and jib working length of 115 ft. through 149 ft. = Class "A" rate and \$2.50 per hour.

*All cranes and boom trucks 50 tons and over, and with boom and jib working length 150 ft.and over = Class "A" rate and \$3.50 per hour.

*Tower crane \$2.00 per hour.

*Addtl \$3.00 per hr for EPA or DEC classified toxic or hazardous waste work and employee is required by regulations to use or wear personal protection.

SUPPLEMENTAL BENEFITS

Per hour worked:

07/01/2010

07/01/2011

Journeyman &

\$22.95

\$ 22.95

all Apprentices

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: (1000) hour terms at the following rate percentage based on "A" rate class

 1st
 2nd
 3rd
 4th

 60%
 65%
 70%
 75%

SUPPLEMENTAL BENEFITS: same as Journeyman

6-545h

Operating Engineer - Heavy&Highway - Tunnel

02/01/2011

JOB DESCRIPTION Operating Engineer - Heavy&Highway - Tunnel

DISTRICT 5

ENTIRE COUNTIES

Allegany, Cayuga, Chemung, Cortland, Jefferson, Lewis, Livingston, Madison, Monroe, Oneida, Onondaga, Ontario, Oswego, Schuyler, Seneca, St. Lawrence, Steuben, Tompkins, Wayne, Yates

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies east of a linedrawn down the center of Route 98 and the entirety of the City of Batavia. Herkimer: That portion of the county that lies west of a line drawn due north and due south through the railroad station in Little Falls, NY.

WAGES

Crane 1: All cranes, including self erecting to be paid \$4.00 per hour over the Class A rate.

Crane 2: All Lattice Boom Cranes and all other cranes with a manufacturer's rating of fifty (50) ton and over to be paid \$3.00 per hour over Class A rate.

Crane 3: All hydraulic cranes and derricks with a manufacturer's rating of forty nine (49) ton nad below, including boom trucks, to be paid \$2.00 per hour over Class A rate.

MASTER MECHANIC/CHIEF TUNNEL ENG .:

CLASS A: Automatic Concrete Spreader (CMI Type); Automatic Fine Grader; Backhoe (except tractor-mounted,rubber tired); Belt Placer (CMI Type); Blacktop Plant (Automated); Cableway; Caisson Auger; Central Mix Concrete Plant (Automated); Concrete Curb Machine (Self-propelled slipform) Concrete Pump (8" or over); Dredge; Dual Drum Paver; Any Mechanical Shaft Drill; Excavator (all purpose-hydraulic-Gradall or Similar); Fork Lift (factory rated 15 ft and over); Front End Loader (4 c.y & over); Gradall; Head Tower (Sauerman or Equal), Hoist Shaft; Hoist (two or three Drum); Mine Hoist; Maintenance Engineer (Shaft and Tunnel); Mine Hoist; Mucking Machine or Mole, Overhead Crane (Gantry or Straddle Type); Pile Driver; Power Grader; Remote Controlled Mole or Tunnel Mach.; Scraper; Shovel; Side Boom; Slip Form Paver (If a second man is needed, he shall be an Oiler); Tractor Drawn Belt Type Loader; Tripper/Maintenance Eng.(Shaft & Tunnel); Truck or Trailer Mounted Log Chipper (self-feeding); Tug Operator (Manned rented equip. excluded); Tunnel Shovel; Mining Machine(Mole and Similar Types).

CLASS B: Automated Central Mix Concrete Plant; Backhoe Trac-Mtd, Rubber Tired); Backhoe (topside); Bitum. Spred. & Mixer, Blacktop Plant non-automated); Blast or Rotary Drill (Truck or Tractor Mounted); Boring Machine; Cage Hoist; Central Mix Plant(NonAutomated) and All Concrete Batching Plants; Compressors (4 or less exceeding 2,000 c.f.m. combined capacity); Concrete Pump; Crusher; Diesel Power Unit; Drill Rigs (Tractor Mounted); Front End Loader (under 4 c.y.); Grayco Epoxy Machine; Hoist (One Drum); Hoist 2 or 3 Drum (Topside); Kolman Plant Loader & Similar Type Loaders (if Employer requires another person to clean the screen or to maintain the equipment, he shall be an Oiler); L.C.M. Work Boat Operator; Locomotive; Maint. Eng. (Topside); Grease Man; Welder; Mixer (for stabilized base-self propelled); Monorail Machine; Plant Eng.; Personnel Hoist; Pump Crete; Ready Mix Concrete Plant; Refrigeration Equipment (for soil stabilization); Road Widener; Roller (all above sub-grade); Sea Mule; Shotcrete Mach.; Shovel (Topside); Tractor with Dozer and/or Pusher; Trencher; Tugger Hoist; Tunnel Locomotive; Winch and Winch Cat.

CLASS C: A Frame Truck; Ballast Regulator (ride-on); Compressors (4 under 2,000 cfm combined capacity; or 3 or less with more than 1200 cfm. but not to exceed 2,000 cfm); Compressors (any size but subject to other provisions for compressors-Dust Collectors, Generators, Pumps, Welding Machines, Light Plants-4 of any type or combination); Concrete Pavement Spreaders and Finishers; Conveyor; Drill core; Drill well; Elec Pump Used in Conjunction with Well Point System; Farm Tractor with Accessories; Fine Grade Machine; ForkLift (under 15 ft); Grout Pump (over (5) cu. ft.; Gunite Machine; Hammers (hydraulic- self propel.); Hydra-Spiker-Ride on; Hydra-Blaster; Hydra Blaster (water); Motorized Form Carrier; Post Hole Digger & Post Driver; Power Sweep; Roller grade & fill); Scarifer (Ride on); Span-Saw (Ride-on); Submersible Electric Pump (when used in lieu of well point system); Tamper (Ride-on); Tie-Extractor, Tie Handler, Tie Inserter, Tie Spacer and Track Liner (Ride-on); Tractor (with towed accessories); Vibratory Compactor; Vibro Tamp, Well Point.

CLASS D: Aggregate Plant; Cement & Bin Operator; Compressors(3 or less not to exceed 1,200 c.f.m. combined capacity); Compressors(any size, but subject to other provisions for compressors-Dust Collectors, Generators, Pumps, Welding Machines, Light Plants-3 or less-any type or combination); Concrete Saw (self propelled); Fireman; Form Tamper; Hydralic Pump (jacking system); Light Plants; Mulching Machine; Oiler; Parapet Concrete or Pavement Grinder; Power Broome towed; Power Heaterman; Revinius Widener; Shell Winder; Steam Cleaner and Tractor; Greaseman; Junior Engineer.

1

Per hour:	07/01/2010	07/01/2011
Crane 1 Crane 2 Crane 3	\$39.08 38.08 37.08	\$40.13 39.13 38.13
Master Mechanic	37.21	38.26
CLASS A CLASS B CLASS C CLASS D	35.08 33.86 31.07 28.06	36.13 34.91 32.12 29.11
SUPPLEMENTAL BENEFITS Per hour paid:		
Journeyman	\$20.90	\$21.85

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1000) hours terms at the following percentages.

 1st term
 60% of Class D

 2nd term
 65% of Class C

 3rd term
 70% of Class B

 4th term
 75% of Class A

Supplemental Benefits per hour paid:

\$20.90 \$21.85

5-832TL.

Operating Engineer - Marine Construction

02/01/2011

DISTRICT 4

JOB DESCRIPTION Operating Engineer - Marine Construction

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per Hour:

DREDGING OPERATIONS 07/01/2010

CLASS A

Operator, Leverman, \$32.89

Lead Dredgeman

CLASS A1 To Conform to Operating Engineer
Dozer, Front Loader Prevailing Wage in Locality where Work
Operator is being Performed including Benefits.

CLASS B

Spider/Spill Barge Operator, \$ 28.49

Tug Operator(over1000hp), OperatorII, Fill Placer, Derrick Operator, Engineer, Chief Mate, Electrician, Chief Welder,

Maintenance Engineer

Certified Welder, \$ 26.84

Boat Operator(licensed)

CLASS C

Drag Barge Operator, \$ 26.14

Steward, Mate,

Assistant Fill Placer,

Welder (please add) \$ 0.06

Boat Operator \$ 25.29

CLASS D

Shoreman, Deckhand, \$21.09

Rodman, Scowman, Cook,

Messman, Porter/Janitor

Oiler(please add) \$ 0.09

SUPPLEMENTAL BENEFITS

Per Hour:

THE FOLLOWING SUPPLEMENTAL BENEFITS APPLY TO ALL CATEGORIES

07/01/2010

All Classes A & B \$ 8.05 plus

7% of straight time wage

(overtime hours add) \$ 0.63

All Class C \$ 7.75 plus

7% of straight time wage

(overtime hours add) \$ 0.48

All Class D \$ 7.45 plus

7% of straight time wage

(overtime hours add) \$ 0.23

OVERTIME PAY

See (B, F, R) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 15, 26) on HOLIDAY PAGE

4-25a-MarConst

Operating Engineer - Survey Crew

02/01/2011

JOB DESCRIPTION Operating Engineer - Survey Crew

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: : The Northern portion of the county from the Northern boundry line of the City of Poughkeepsie North.

Genesee: Only that portion of the county that lies east of a line down the center of Route 98 to include all area that lies within the City of

Batavia

WAGES

Per hour:

SURVEY CLASSIFICATIONS: Party Chief- One who directs a survey party. Instrument person- One who runs the instrument and assists the Party Chief. Rod person- One who holds the rods and, in general, assists the survey party.

	07/01/2010	06/01/2011	06/01/2012
Survey Rates:			
Party Chief	\$ 30.87	\$ 31.62	\$ 32.62
Instrument/Rod person	28.10	28.85	29.85

Additional \$3.00 per hr. for work in a Tunnel.

Additional \$2.50 per hr. for EPA or DEC certified toxic or hazardous waste work

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman	\$ 19.25	\$ 20.50	\$ 21.75

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: (1 yr. or 1000 hrs.) terms at the following wage rates.

1st year 60% 2nd year 70%	\$ 16.86 19.67	\$ 17.31 20.19	\$ 17.91 20.89
3rd year 80% SUPPLEMENTAL BENEFITS:	22.48	23.08	23.88
	\$ 19.25	\$ 20.50	\$ 21.75

6-545 D.H.H.

Operating Engineer - Survey Crew - Consulting Engineer

02/01/2011

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: The northern portion of the county from the northern boundry line of the City of Poughkeepsie north.

Genesee: Entire county except that portion of the county that lies west of a line down the center of Route 98 excluding that area that lies within the City of Batavia.

WAGES

Per hour:

Feasibility and preliminary design surveying, line and grade surveying for inspection or supervision of construction

when performed under a Consulting Engineer Agreement.

SURVEY CLASSIFICATIONS: Party Chief- One who directs a survey party. Instrument Man- One who runs the instrument and assists the Party Chief. Rodman- One who holds the rods and in general, assists the survey party.

	06/01/2010	06/01/2011	06/01/2012
Survey Rates:			
Party Chief	\$ 30.87	\$ 31.62	\$ 32.62
Instrument/Rodperson	28.10	28.85	29.85

Additional \$3.00 per hr. for work in a Tunnel.

Additional \$2.50 per hr. for EPA or DEC certified toxic or hazardous waste work

SUPPLEMENTAL BENEFITS

Per hour worked:

\$ 19.25 \$ 20.50 \$ 21.75

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

6-545 DCE

Painter 02/01/2011

JOB DESCRIPTION Painter

DISTRICT 3

ENTIRE COUNTIES

Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Cortland, Delaware, Erie, Genesee, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates

WAGES

Per hour:	07/01/2010	05/01/2011
		Additional
Bridge*	\$ 34.40	\$ 2.00
Tunnel*	34.40	2.00
Tank*	32.40	2.00

For Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

SUPPLEMENTAL BENEFITS

Per hour worked:

\$ 18.95 \$ 19.00

OVERTIME PAY

Exterior work only See (B, E4*, F, R) on OVERTIME PAGE. All other work See (B, F, R) on OVERTIME PAGE.

* Note - Saturday is payable at straight time if the employee misses work, except where a doctor's or hospital verification of illness is produced Monday through Friday when work was available to the employee.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1000 hour terms at the following percentage of Journeyman's wage rate:

1st 2nd 3rd 4th 5th 6th 50% 55% 60% 65% 75% 85%

Supplemental benefits per hour worked:

1st & 2nd terms \$ 1.90 3rd & 4th terms 4.90

^{*} Note an additional \$1.00 per hour is required when the contracting agency or project specification requires any shift to start prior to 6:00am or after 12:00 noon.

5th & 6th terms

5.90

3-4-Bridge, Tunnel, Tank

Painter 02/01/2011

JOB DESCRIPTION Painter DISTRICT 2

ENTIRE COUNTIES

Cortland, Tompkins

Brush/Roller Epoxy

WAGES

Per hour 07/01/2010 Brush or roll, taper \$24.40 Bosum Chair, Swing Scaffold 25.00 Window Platform 25.00 25.00 Structural Steel 25.40 Spray Sandblasting 25.30 25.90 Spray Epoxy

SINGLE IRREGULAR WORK SHIFT:

A single irregular work shift can start any time from 2:00pm to 1:00am. All employees who work a single irregular work shift on government mandated night work shall be paid an additional \$2.25 per hour.

SUPPLEMENTAL BENEFITS

07/01/2010

25.50

Journeymen \$ 15.88

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

PAINTER APPRENTICES: (1000) hour terms at the following percentage of journeyman's wage.

2nd 4th 5th 1st 3rd 6th 7th 8th 50% 55% 60% 65% 70% 75% 80% 90%

DRY WALL TAPER/FINISHER APPRENTICES (with less than 2000 hrs. as of 7/29/04)

(1000) hour terms at the following percentage of the journeyman's wage.

1st 2nd 3rd 4th 5th 6th 50% 55% 60% 65% 75% 85%

DRY WALL TAPER/FINISHER APPRENTICES (with more than 2000 hrs. as of 7/29/04)

(1000) hour terms at the following percentage of journeymans wage.

 1st
 2nd
 3rd
 4th

 50%
 60%
 70%
 80%

SUPPLEMENTAL BENEFITS:(per hour worked)

05/01/2010

Apprentices:

Painter Apprentice

 1st through 4th terms
 \$ 4.85

 5th & 6th terms
 5.35

 7th & 8th terms
 5.85

Dry Wall Apprentices

1st through 4th terms \$4.85 5th term 5.35 6th term 5.85

Painter - Metal Polisher 02/01/2011

JOB DESCRIPTION Painter - Metal Polisher

DISTRICT 9

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

07/01/2010

Metal Polisher \$ 25.60*

*Note: All workers shall be paid an additional premium in an amount equal to twenty (20%) percent of their basic straight time rate of pay for all time worked on hanging scaffolds and on standing scaffolds while working more than 34 feet off the ground. Such premium are to be paid on top of their straight time or overtime, whichever is applicable. This also applies to employees erecting scaffolding.

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2010

Journeyworker: \$ 11.12

OVERTIME PAY

See (B, E, Q, T) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE Overtime: See (5, 6, 9, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

55% of Basic Polisher Rate

9-8A/28A-MP

2-178 I

Plumber 02/01/2011

JOB DESCRIPTION Plumber DISTRICT 6

ENTIRE COUNTIES

Chemung, Cortland, Onondaga, Schuyler, Tompkins

PARTIAL COUNTIES

Madison: Only the Townships of Sullivan, Cazenovia and De Ruyter.

Seneca: Only the Townships of Covert and Lodi.

Steuben: Only the Townships of Addison, Bath, Bradford, Campbell, Canton, Corning, Erwin, Hornby, Lindley, Pulteney, Rathbone,

Thurston, Tuscarora, Urbana and Wayne.

Tioga: Only the Townships of Barton, Berkshire, Candor, Richford, Spencer, Nichols and Tioga.

WAGES

 Per hour:
 07/01/2010
 05/01/2011

 Additional

 Plumber/Steamfitter/Welder/

 Pipefitter/HVAC
 \$ 28.86
 \$ 2.20

 Refrigeration
 28.86
 2.20

*NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS FOR AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1st Shift 7:30 AM to 4:00 PM \$ 28.86

2nd Shift 4:00 PM to 12:00 Midnight ABOVE RATE PLUS 15% 3rd Shift 12:00 Midnight to 7:30 AM ABOVE RATE PLUS 20%

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 18.92

OVERTIME PAY

Time & 1/2 for 9th & 10th hours Monday thru Friday and first 10 hours on Saturday. All other O.T. hours are double-time.

HOLIDAY

Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following percentage of journeyman's wage.

1st 2nd 3rd 4th 5th 50% 55% 60% 70% 85%

Supplemental Benefits per hour worked:

Appr 1st year \$8.80 Appr all other years 18.32*

*plus term % of \$.50

6-267-SF

02/01/2011 Plumber

JOB DESCRIPTION Plumber

DISTRICT 2

ENTIRE COUNTIES

Broome, Chenango

PARTIAL COUNTIES

Cortland: Only the Township of Marathon.

Delaware: Only the Townships of Andes, Bovina, Colchester, Davenport, Delhi, Deposit, Franklin, Hamden, Hancock, Harpersfield, Kortright, Masonville, Meredith, Sidney, Stamford, Thompkins and Walton.

Madison: Only the Township of Georgetown.

Otsego: Only the Townships of Burlington, Butternuts, Decatur, Edmeston, Hartwick, Laurens, Maryland, Milford, Morris, New Lisbon, Oneonta, Otego, Pittsfield, Unadilla, Westford and Worchester.

Tioga: Only the Townships of Newark Valley and Owego.

WAGES

Per hour: 07/01/2010 5/01/11 5/01/12 5/01/13

Plumber/ \$27.88 Additional Additional Additional Steamfitter 27.88 \$2.25 \$2.25 \$2.25

SUPPLEMENTAL BENEFITS

Journeymen \$18.29

Agency-mandated shift operations:

1. Less than 5 consecutive days-Time-and-one-half of regular hourly rate.

2. 5 consecutive work days or more:

1st irregular shift-regular hourly rate plus 10% 2nd irregular shift-regular hourly rate plus 15%

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

See (1) on HOLIDAY PAGE Paid: Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following percentage of Journeyman's

wage.

5th. 2nd 3rd. 4th. 1st. 40% 50% 60% 70% 80%

SUPPLEMENTAL BENEFITS: (per hour worked)

07/01/2010

Apprentices \$ 14.29

2-112s-SF

Roofer 02/01/2011

6-195

ENTIRE COUNTIES

Cayuga, Cortland, Franklin, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence

WAGES

Per hour 07/01/2010

Roofer, Waterproofer \$ 24.50

Addtl per hr for Pitch removal .90

and application.

Addtl per hr for asbestos 1.20

abatement

Does not include metal flashing, gravel stop and metal roofing; see Sheetmetal Worker.

NOTE: WHEN MANDATED BY THE OWNER OR AGENCY FOR HOURS WORKED AFTER 5:30 PM AND BEFORE 5:30 AM, THERE WILL BE AN ADDITIONAL \$3.75 PER HR PREMIUM.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 15.07

Additional contribution on any .75

asbestos abatement work.

OVERTIME PAY

See (B, E,*,Q) on OVERTIME PAGE

* Saturday may be paid at straight time if it is the 5th day worked, unless it was a previously scheduled work day. But if a holiday falls in that week and 32 hours were worked, Saturday will be paid at 1 1/2 times the rate.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1000) hour terms at the following percentage of journeyman's wage.

 1st TERM 55%
 2nd TERM 65%
 3rd TERM 75%
 4th TERM 85%

 1st 999 HRS
 1000 to 1999 HRS
 2000 to 2999 HRS
 3000 to 3999

 \$13.48
 \$15.93
 \$18.38
 \$20.83

Supplemental Benefits:

 Appr 1st and 2nd terms
 \$ 11.62

 Appr 3rd term
 14.07

 Appr 4th term
 15.07

Additional contribution on any

asbestos abatement work. .75

Sheetmetal Worker 02/01/2011

JOB DESCRIPTION Sheetmetal Worker DISTRICT 6

ENTIRE COUNTIES

Cayuga, Chenango, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence

WAGES

Per hour: 07/01/2010

Sheetmetal Worker:

*(under \$10 million) \$ 26.39 *(over \$10 million) 27.39

^{*}For total cost of Sheetmetal contract only.

TO INCLUDE METAL STANDING SEAM ROOFING, FLASHING AND GRAVEL STOP.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 15.48

* plus 3% of hourly wage paid

* Note: The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, *Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1/2)year term	s at the followi	ing percentage	of journeyma	ın's wage.					
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
40%	45%	50%	55%	60%	65%	70%	75%	80%	85%
\$10.56	11.88	13.20	14.51	15.83	17.15	18.47	19.79	21.11	22.43
Apprentices: S	Supplemental b	penefits							
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$9.06	9.35	9.65	9.94	10.23	10.51	11.83	12.12	12.41	12.70

All apprentices: Plus 3% of hourly wage paid (See note above).

6-58

Sprinkler Fitter 02/01/2011

JOB DESCRIPTION Sprinkler Fitter

DISTRICT 1

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Per hour

07/01/2010

Sprinkler \$30.15

Fitter

SUPPLEMENTAL BENEFITS

Per hour worked

Journeyman \$ 18.85

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

Note: When a holiday falls on Sunday, the following Monday shall be considered a holiday and all work performed on either day shall be at the double time rate. When a holiday falls on Saturday, the preceding Friday shall be considered a holiday and all work performed on either day shall be at the double time rate.

REGISTERED APPRENTICES

Wages per hour

One Half Year terms at the following percentage of Journeyman's wage

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
50%	50%	55%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

07/01/2010

 1st & 2nd terms
 \$ 8.41

 3rd & 4th terms
 \$ 13.35

 All others
 \$ 18.85

1-669

Teamster - Building 02/01/2011

JOB DESCRIPTION Teamster - Building

DISTRICT 6

DISTRICT 6

ENTIRE COUNTIES

Cayuga, Cortland, Seneca, Tompkins, Yates

PARTIAL COUNTIES

Allegany: Only the Townships of Almond, Alfred, Burns and West Almond.

Steuben: Only the Townships of Avoca, Canisteo, Cohocton, Dansville, Freemont, Greenwood, Hartsville, Hornell, Howard, Jasper, Prattsburg, Pulteney, Troupsburg, West Union and Wheeler.

WAGES

Per hour:

GROUP 1: Warehousemen, Yardmen, Truck Helpers, Pickups, Panel Trucks, Flatboy Material Trucks (straight jobs), Single Axle Dump Trucks, Dumpsters, Material Checkers & Receivers, Greasers, Truck Tiremen, Mechanics Helpers & Parts Chasers.

GROUP 2: Tandems and Batch Trucks, Mechanics.

GROUP 3: Semi-Trailers, Low-boy Trucks, Asphalt Distributor Trucks, and Agitator, Mixer Trucks and dumpcrete type vehicles, Truck Mechanic, Fuel Trucks.

GROUP 4: Specialized Earth Moving Equipment, Euclid type, or similar off-highway where not self-loading, Straddle (Ross) Carrier, & self-contained concrete mobile truck.

GROUP 5: Off-highway Tandem Back-Dump, Twin Engine Equipment & Double-Hitched Equipment where not self-loading.

07/01/2010

Building:

GROUPS #1 thru #4 \$ 16.89 GROUP #5 16.89

SUPPLEMENTAL BENEFITS

Per hour worked:

\$ 6.28

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 15) on HOLIDAY PAGE Overtime: See (5, 6, 15) on HOLIDAY PAGE

6-317AB

Teamster - Heavy&Highway

02/01/2011

JOB DESCRIPTION Teamster - Heavy&Highway

ENTIRE COUNTIES

Cayuga, Cortland, Seneca, Tompkins, Yates

PARTIAL COUNTIES

Allegany: Only the Townships of Almond, Alfred, Burns and West Almond.

Steuben: Only the Townships of Avoca, Canisteo, Cohocton, Dansville, Freemont, Greenwood, Hartsville, Hornell, Howard, Jasper, Prattsburg, Pulteney, Troupsburg, West Union and Wheeler.

WAGES

Per hour:

GROUP 1: Warehousemen, Yardmen, Truck Helpers, Pickups, Panel Trucks, Flatboy Material Trucks (straight jobs), Single Axle Dump Trucks, Dumpsters, Material Checkers & Receivers, Greasers, Truck Tiremen, Mechanics Helpers and Parts Chasers, Tandems & Batch Trucks, Mechanics, Semi-Trailers, Low-boy Trucks, Asphalt Distributor Trucks, and Agitator, Mixer Trucks and dumpcrete type vehicles, Truck Mechanic, Fuel Trucks.

GROUP 2: Specialized Earth Moving Equipment- Euclid type, or similar off- highway equipment, where not self-loading, Straddle (Ross) Carrier, and self-contained concrete mobile truck, Off-highway Tandem Back-Dump, Twin Engine Equipment and Double-Hitched Equipment where not self-loading.

07/01/2010

Heavy/Highway

GROUP #1 \$ 21.49 GROUP #2 21.69

For work bid on or after April 1, 1982 there shall be a 12 month carry over of the negotiated rate in effect at the time of bid.

** IMPORTANT NOTICE - EFFECTIVE 04/01/2009 **

Four (4), ten (10) hour days may be worked at straight time during a week.

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30R; additionally, there must be a dispensation of hours in place on the project.

SUPPLEMENTAL BENEFITS

Per hour paid:

\$ 16.23

OVERTIME PAY

See (B, E2, J) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

6-317a.hh

Welder 02/01/2011

JOB DESCRIPTION Welder

DISTRICT 1

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour 07/01/2010

Welder (To be paid the same rate of the mechanic performing the work)

OVERTIME PAY

HOLIDAY

1-As Per Trade

Overtime Codes

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

(A)	Time and one half of the hourly rate after 7 hours per day
(AA)	Time and one half of the hourly rate after 7 and one half hours per day
(B)	Time and one half of the hourly rate after 8 hours per day
(B1)	Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday. Double the hourly rate for all additional hours
(B2)	Time and one half of the hourly rate after 40 hours per week
(C)	Double the hourly rate after 7 hours per day
(C1)	Double the hourly rate after 7 and one half hours per day
(D)	Double the hourly rate after 8 hours per day
(D1)	Double the hourly rate after 9 hours per day
(E)	Time and one half of the hourly rate on Saturday
(E1)	Time and one half 1st 4 hours on Saturday Double the hourly rate all additional Saturday hours
(E3)	Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
(E2)	Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
(E4)	Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
(F)	Time and one half of the hourly rate on Saturday and Sunday
(G)	Time and one half of the hourly rate on Saturday and Holidays
(H)	Time and one half of the hourly rate on Saturday, Sunday, and Holidays
(1)	Time and one half of the hourly rate on Sunday
(J)	Time and one half of the hourly rate on Sunday and Holidays
(K)	Time and one half of the hourly rate on Holidays
(L)	Double the hourly rate on Saturday
(M)	Double the hourly rate on Saturday and Sunday
(N)	Double the hourly rate on Saturday and Holidays
(O)	Double the hourly rate on Saturday, Sunday, and Holidays
(P)	Double the hourly rate on Sunday
(Q)	Double the hourly rate on Sunday and Holidays
(R)	Double the hourly rate on Holidays
(S)	Two and one half times the hourly rate for Holidays, if worked
(S1)	Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.
(T)	Triple the bourly rate for Holidays, if worked

- (U) Four times the hourly rate for Holidays, if worked
- (V) Including benefits at SAME PREMIUM as shown for overtime
- (W) Time and one half for benefits on all overtime hours.

NOTE:BENEFITS are PER HOUR WORKED, for each hour worked, unless otherwise noted

Holiday Codes

PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

OVERTIME Holiday Pay:

(27)

Memorial Day

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

(1)	None
(2)	Labor Day
(3)	Memorial Day and Labor Day
(4)	Memorial Day and July 4th
(5)	Memorial Day, July 4th, and Labor Day
(6)	New Year's, Thanksgiving, and Christmas
(7)	Lincoln's Birthday, Washington's Birthday, and Veterans Day
(8)	Good Friday
(9)	Lincoln's Birthday
(10)	Washington's Birthday
(11)	Columbus Day
(12)	Election Day
(13)	Presidential Election Day
(14)	1/2 Day on Presidential Election Day
(15)	Veterans Day
(16)	Day after Thanksgiving
(17)	July 4th
(18)	1/2 Day before Christmas
(19)	1/2 Day before New Years
(20)	Thanksgiving
(21)	New Year's Day
(22)	Christmas
(23)	Day before Christmas
(24)	Day before New Year's
(25)	Presidents' Day
(26)	Martin Luther King, Jr. Day
(27)	Mamarial Day



New York State Department of Labor - Bureau of Public Work State Office Building Campus Building 12 - Room 130 Albany, New York 12240

REQUEST FOR WAGE AND SUPPLEMENT INFORMATION

As Required by Articles 8 and 9 of the NYS Labor Law

 $Fax\ (518)\ 485\text{--}1870\ \text{or mail this form for new schedules or for determination for additional occupations}.$

This Form Must Be Typed

Submitted By: (Check Only One) Contracting Agency Architect or Engineering	g Firm Public Work District Office Da	ate:
A. Public Work Contract to be let by: (Enter Data Pertaining to	Contracting/Public Agency)	
1. Name and complete address	2. NY State Units (see Item 5)9. □ 01 DOT □ 02 OGS □ 03 Dormitory Authority □ 04 State University Construction Fund □ 05 Mental Hygiene Facilities Corp.	□ 07 City □ 08 Local School District □ 09 Special Local District, i.e., Fire, Sewer, Water District □ 10 Village □ 11 Town □ 12 County □ 13 Other Non-N.Y. State
Telephone: () Fax: () E-Mail:	☐ 06 OTHER N.Y. STATE UNIT	(Describe)
3. SEND REPLY TO ☐ check if new or change) Name and complete address:	4. SERVICE REQUIRED. Check appropriate information. New Schedule of Wages and Supple APPROXIMATE BID DATE: Additional Occupation and/or Redeterms.	ements.
Telephone:() Fax: () E-Mail:	PRC NUMBER ISSUED PREVIOUSLY FOR THIS PROJECT :	OFFICE USE ONLY
B. PROJECT PARTICULARS		
5. Project Title Description of Work Contract Identification Number Note: For NYS units, the OSC Contract No.	6. Location of Project: Location on Site Route No/Street Address Village or City Town County	
7. Nature of Project - Check One: 1. New Building 2. Addition to Existing Structure 3. Heavy and Highway Construction (New and Repair) 4. New Sewer or Waterline 5. Other New Construction (Explain) 6. Other Reconstruction, Maintenance, Repair or Alteration 7. Demolition 8. Building Service Contract	8. OCCUPATION FOR PROJECT : Construction (Building, Heavy Highway/Sewer/Water) Tunnel Residential Landscape Maintenance Elevator maintenance Exterminators, Fumigators Fire Safety Director, NYC Only	☐ Guards, Watchmen ☐ Janitors, Porters, Cleaners, Elevator Operators ☐ Moving furniture and equipment ☐ Trash and refuse removal ☐ Window cleaners ☐ Other (Describe)
9. Does this project comply with the Wicks Law involving sep	arate bidding? YES ☐ NO ☐ -	
10. Name and Title of Requester	Signature	



NEW YORK STATE DEPARTMENT OF LABOR Bureau of Public Work - Debarment List

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Under Article 8 and Article 9 of the NYS Labor Law, a contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work or public building service contract/sub-contract with the state, any municipal corporation or public body for a period of five (5) years from the date of debarment when:

- Two (2) final determinations have been rendered within any consecutive six-year (6) period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements
- One (1) final determination involves falsification of payroll records or the kickback of wages and/or supplements

NOTE: The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = NYS Dept. of Labor; NYC = New York City Comptroller's Office; AG = NYS Attorney General's Office; DA = County District Attorney's Office.

A list of those barred from bidding, or being awarded, any public work contract or subcontract with the State, under section 141-b of the Workers' Compensation Law, may be obtained at the following link, on the NYS DOL Website:

https://dbr.labor.state.ny.us/EDList/searchPage.do

AGENCY	Fiscal Officer	SSN/FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	AG	****1355	4-A GENERAL CONSTRUCTION CORP.		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL	****7478	A & T GENERAL CONSTRUCTION INC.		3 ALAN B SHEPARD PLACE YONKERS NY 10705	12/11/2006	12/11/2011
DOL	NYC		A & T IRON WORKS INC		25 CLIFF STREET NEW ROCHELLE NY 10801	06/15/2010	06/15/2015
DOL	DOL	*****0711	A ULIANO & SON LTD		22 GRIFFEN COURT MILLER PLACE NY 11746	10/26/2010	10/26/2015
DOL	DOL		A ULIANO CONSTRUCTION		22 GRIFFEN COURT MILLER PLACE NY 11746	10/26/2010	10/26/2015
DOL	NYC	****5804	AAR CO ELECTRIC INC		5902 AVENUE N BROOKLYN NY 11234	03/20/2009	03/20/2014
DOL	DOL	*****9095	ABDO TILE CO		6179 EAST MOLLOY ROAD EAST SYRACUSE NY 13057	06/25/2010	06/25/2015
DOL	DOL	****9095	ABDO TILE COMPANY		6179 EAST MOLLOY ROAD EAST SYRACUSE NY 13057	06/25/2010	06/25/2015
DOL	DOL	*****0635	ABOVE ALL PUMP REPAIR CORP		360 KNICKERBOCKER AVENUE BATAVIA NY 11716	10/20/2008	10/20/2013
DOL	NYC	****8758	ACC CONSTRUCTION CORP.		6 EAST 32ND ST - 7TH FL NEW YORK NY 10016	05/25/2006	05/25/2011
DOL	NYC	****5022	ACE DRYWALL SYSTEMS INC.		194 ASHLAND PLACE BROOKLYN NY 11217	03/06/2008	03/06/2013
DOL	AG	*****8219	ACTIVE CABLING INC		C/O FRANK DECAPITE 7 SYCAMORE ROAD DRWOODBURY NY 11797	10/02/2008	10/01/2013
DOL	DOL		ADAM A CEMERYS		2718 CURRY ROAD SCHENECTADY NY 12303	07/08/2010	07/08/2015
DOL	DOL	*****3012	ADAM DECKMAN	DECKMAN PAINTING	154 POND VIEW PARKWAY ROCHESTER NY 14612	04/16/2007	04/16/2012
DOL	DOL		ADAM'S FLOOR COVERING LLC		2718 CURRY ROAD SCHENECTADY NY 12303	07/08/2010	08/08/2015
DOL	DOL		AFFORDABLE PAINTING PLUS		367 GREEVES ROAD NEW HAMPTON NY 10958	10/01/2010	10/01/2015
DOL	DOL		ALL TOWNS MECHANICAL	BARRY MORRIS	18 EAST SUNRISE HIGHWAY FREEPORT NY 11758	01/21/2008	01/21/2013
DOL	DOL	*****3101	ALLSTATE CONCRETE CUTTING, INC.		635 MIDLAND AVENUE GARFIELD NJ 07026	07/09/2007	07/09/2012
DOL	DOL	****8534	ALPHA INTERIORS INC		513 ACORN STREET/ SUITE C DEER PARK NY 11729	05/27/2010	05/27/2015
DOL	DOL	*****8291	AMIR'S VISION INC		230 PRATT STREET BUFFALO NY 14204	09/17/2008	09/17/2013
DOL	AG		ANASTASIA ANTHOULIS	AKA STACEY GOUZOS	131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL	*****0860	ANDREA STEVENS	STEVENS TRUCKING	2458 EAST RIVER ROAD CORTLAND NY 13045	01/23/2008	01/23/2013
DOL	AG		ANTHONY BRANCA		700 SUMMER STREET STAMFORD CT	11/24/2009	11/24/2014
DOL	DOL		ANTHONY POSELLA		30 GLEN HOLLOW ROCHESTER NY 14622	10/19/2009	10/19/2014
DOL	DOL		ANTHONY T RINALDI		C/O CRAIN CONSTRUCTION CO KINDERHAMACK RDKACKENSACK NY 07061	10/02/2008	10/02/2013
DOL	DOL		ANTHONY TAORMINA		215 MCCORMICK DRIVE BOHEMIA NY 11716	05/20/2009	05/20/2014
DOL	DOL		ANTHONY ULIANO		22 GRIFFEN COURT MILLER PLACE NY 11746	10/26/2010	10/26/2015
DOL	AG	****7327	ANTHOS CONTRACTING CORP		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL	****2725	ARAGONA CONSTRUCTION CORP		5755 NEWHOUSE ROAD EAST AMHERST NY 14051	10/10/2007	10/10/2012
DOL	DOL	****8688	ARC MECHANICAL CORP		215 MCCORMICK DRIVE BOHEMIA NY 11716	05/20/2009	05/20/2014
DOL	DOL	****8482	ARGO CONTRACTING CORP		5752 WEST WEBB ROAD YOUNGSTOWN OH 44515	05/21/2008	05/21/2013
DOL	NYC	****5804	ARIE BAR	C/O AAR CO ELECTRIC INC	5902 AVENUE N BROOKLYN NY 11234	03/20/2009	03/20/2014
DOL	DOL		ARTHUR C OSUORAH		PO BOX 1295 BUFFALO NY 14215	02/15/2008	02/15/2013
DOL	DOL	*****8027	ARTHUR DESIGN ENGINEERS & ASSOCIATES		PO BOX 1295 BUFFALO NY 14215	02/15/2008	02/15/2013
DOL	DOL	****9336	ARTIERI SPECIALTIES LLC	SWITZER SALES	107 STEVENS STREET LOCKPORT NY 14094	11/04/2009	11/04/2014

DOL	DOL	****2993	AST DRYWALL & ACOUSTICS INC		46 JOHN STREET - STE 711 NEW YORK NY 10038	12/16/2008	12/16/2013
DOL	DA	****5761	AZTEC PLUMBING & HEATING CORP		153 BAYWOODS LANE BAY SHORE NY 11706	03/19/2007	03/19/2012
DOL	DOL	****7828	BALLAGH GENERAL CONTRACTING INC		250 KNEELAND AVENUE YONKERS NY 10705	07/09/2007	07/09/2012
DOL	NYC		BASIL ROMEO		243-03 137TH AVENUE ROSEDALE NY 11422	03/25/2010	03/25/2015
DOL	DOL		BEATRICE ORTEGA		764 BRADY AVE - APT 631 BRONX NY 10462	05/21/2008	05/21/2013
DOL	DOL		BENNY VIGLIOTTI		C/O LUVIN CONSTRUCTION CO P O BOX 357CARLE PLACE NY 11514	03/15/2010	03/15/2015
DOL	DOL		BERNADETTE GORMALLY		250 KNEELAND AVENUE YONKERS NY 10705	07/09/2007	07/09/2012
DOL	NYC		BERNARD COHNEN		193 HARWOOD PLACE PARAMUS NJ 07652	05/14/2008	05/14/2013
DOL	DOL	****9890	BETTY JOE FRAZIER	NOBLE CONSTRUCTI ON GROUP	23960 WHITE ROAD WATERTOWN NY 13601	02/14/2008	02/14/2013
DOL	DOL		BIAGIO CANTISANI		200 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL	*****0818	BLASTEC INC	MILLER SANDBLASTIN G & PAINTING	121 LINCOLN AVENUE ROCHESTER NY 14611	02/21/2008	02/21/2013
DOL	DOL	*****8501	BLOCKHEAD CONCRETE & PAVING INC		P O BOX 71 CHEEKTOWAGA NY 14225	09/03/2008	09/03/2013
DOL	NYC	*****8377	BOSPHORUS CONSTRUCTION CORPORATION		3817 KINGS HIGHWAY-STE 1D BROOKLYN NY 11234	07/08/2010	07/08/2015
DOL	DOL		BRIAN HOXIE		2219 VALLEY DRIVE SYRACUSE NY 13207	12/04/2009	12/04/2014
DOL	DOL	****4311	C & F SHEET METAL CORP		201 RICHARDS STREET BROOKLYN NY 11231	02/25/2009	02/24/2014
DOL	DOL	*****9286	CALI BROTHERS INC		1223 PARK STREET PEEKSKILL NY 10566	09/12/2007	09/12/2012
DOL	DOL		CANTISANI & ASSOCIATES LTD		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	NYC	****4437	CAPPRY CONTRACTING MGMT. CORP		1081 CONEY ISLAND AVENUE BROOKLYN NY 11230	02/09/2006	02/09/2011
DOL	DOL		CARMODY CONCRETE CORP		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		CARMODY ENTERPRISES LTD		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		CARMODY INC		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		CARMODY MASONRY CORP		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		CARMODY"2" INC		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL	*****9721	CATENARY CONSTRUCTION CORP		112 HUDSON AVENUE ROCHESTER NY 14605	02/14/2006	10/20/2014
DOL	DOL	****7924	CBI CONTRACTING INCORPORATED		2081 JACKSON AVENUE COPIAGUE NY 11726	06/03/2010	06/03/2015
DOL	DOL		CHARLES MURDOUGH		203 KELLY DRIVE EAST AURORA NY 14052	03/26/2008	03/26/2013
DOL	DOL		CHARLES RIBAUDO		513 ACORN ST - SUITE C DEER PARK NY 11729	05/27/2010	05/27/2015
DOL	DOL	****1416	CHEROMINO CONTROL GROUP LLC		61 WILLET ST - SUITE 14 PASSAIC NJ 07055	12/03/2009	07/09/2015
DOL	DOL		CHESTER A BEDELL		1233 WALT WHITMAN ROAD MELVILLE NY 11747	04/29/2008	04/29/2013
DOL	DOL		CHRISTOPHER NICHOLSON		91 NEWMAN PLACE BUFFALO NY 14210	10/19/2006	10/19/2011
DOL	DOL		CITY GENERAL BUILDERS INC		131 MELROSE STREET BROOKLYN NY 11206	03/02/2010	03/02/2015
DOL	DOL	****7086	CITY GENERAL IRON WORKS INC		131 MELROSE STREET BROOKLYN NY 11206	03/02/2010	03/02/2015
DOL	DOL	****5329	CNY MECHANICAL ASSOCIATES INC		P O BOX 250 EAST SYRACUSE NY 13057	11/06/2008	11/06/2013
DOL	DOL	*****6866	COMMERCIAL SYSTEM CONSTRUCTION		91 NEWMAN PLACE BUFFALO NY 14210	10/19/2006	10/19/2011
DOL	DOL	****5740	CORTLAND GLASS COMPANY INC		336 TOMPKINS STREET CORTLAND NY 13045	02/02/2010	10/21/2015
DOL	DOL	****7794	CRAIN CONSTRUCTION COMPANY INC		ONE KINDERHAMACK ROAD HACKENSACK NJ 07061	10/02/2008	10/02/2013

DOL	DOL		CRAIN CONSTRUCTION OF NEW JERSEY		ONE KINDERHAMACK ROAD HACKENSACK NJ 07061	10/02/2008	10/02/2013
DOL	DOL		CRAIN CONSTRUCTION OF NEW YORK INC		C/O CRAIN CONSTRUCTION CO ONE KINDERHAMACK ROADHACKENSACK NJ 07061	10/02/2008	10/02/2013
DOL	DOL		CRAIN CONTRACTING COMPANY		ONE KINDERHAMACK ROAD HACKENSACK NJ 07061	10/02/2008	10/02/2013
DOL	NYC	****8777	CROSSLAND ELECTRICAL SYSTEMS INC		846 EAST 52ND STREET BROOKLYN NY 11203	12/19/2008	12/29/2013
DOL	DOL	*****0115	CROW AND SUTTON ASSOCIATES INC		949 GROVESIDE ROAD BUSKIRK NY 12028	08/27/2008	08/27/2013
DOL	DOL	****4266	CRYSTAL INTERIOR CONTRACTING INC		922 CRESCENT STREET BROOKLYN NY 11208	05/21/2008	05/21/2013
DOL	DOL	****1804	CUSTOM GARDEN LANDSCAPING INC		283 NORTH MIDDLETOWN ROAD PEARL RIVER NY 10965	09/28/2009	09/28/2014
DOL	DOL	****6339	D J FLOORS INC		9276 VIA CIMATO DRIVE CLARENCE CENTER NY 14032	08/29/2007	08/29/2012
DOL	DOL		D JAMES SUTTON		949 GROVESIDE ROAD BUSKIRK NY 12028	08/27/2008	08/27/2013
DOL	DOL		DANIEL CELLUCCI ELECTRIC		17 SALISBURY STREET GRAFTON MA 01519	06/02/2010	06/02/2015
DOL	DOL	****7129	DANIEL T CELLUCCI	DANIEL CELLUCCI ELECTRIC	17 SALISBURY STREET GRAFTON MA 01519	06/02/2010	06/02/2015
DOL	DOL		DARIN ANDERSON		134-25 166 PLACE #5E JAMAICA NY 11434	08/07/2008	08/07/2013
DOL	DOL		DARREN MAYDWELL		115 LEWIS STREET YONKERS NY 10703	05/12/2009	05/12/2014
DOL	DOL		DEANNA J REED		5900 MUD MILL RD-BOX 949 BREWERTON NY 13029	09/02/2008	09/02/2013
DOL	DOL	*****3012	DECKMAN PAINTING		154 POND VIEW PARKWAY ROCHESTER NY 14612	04/16/2007	04/16/2012
DOL	DOL	****2311	DELCON CONSTRUCTION CORP		220 WHITE PLAINS ROAD TARRYTOWN NY 10591	08/27/2009	08/27/2014
DOL	DOL	****6971	DELPHI PAINTING AND DECORATING INC		1445 COMMERCE AVENUE BRONX NY 10461	10/09/2007	10/09/2012
DOL	DOL	*****3538	DELTA CONTRACTING PAINTING AND DESIGN INC		75 MCCULLOCH DRIVE DIX HILLS NY 11746	10/19/2010	10/19/2015
DOL	DOL		DESMOND CHARLES		922 CRESCENT STREET BROOKLYN NY 11208	05/21/2008	05/21/2013
DOL	DOL	****7157	DG PIPELINE INC		312 HALSEYVILLE ROAD ITHACA NY 14850	09/06/2006	09/06/2011
DOL	DOL		DIMITEIUS KASSIMIS		152-65 11TH AVENUE WHITESTONE NY 11357	05/22/2008	05/22/2013
DOL	DOL		DONALD NOWAK		10 GABY LANE CHEEKTOWAGA NY 14227	10/15/2009	10/15/2014
DOL	DOL		DONALD SCHWENDLER		9276 VIA CIMATO DRIVE CLARENCE CENTER NY 14032	08/29/2007	08/29/2012
DOL	DOL	****6148	DOT CONSTRUCTION OF NY INC		765 BRADY AVE - APT 631 BRONX NY 10462	05/21/2008	05/21/2013
DOL	DOL		DOUGLAS MCEWEN		121 LINCOLN AVENUE ROCHESTER NY 14611	02/21/2008	02/21/2013
DOL	DOL		DOUGLAS S GRIFFEN		312 HALSEYVILLE ROAD ITHACA NY 14850	09/06/2006	09/06/2011
DOL	DOL		DRAGOLJUB RADOJEVIC	61 WILLET ST - SUITE 14	PASSAIC NJ 07055	12/03/2009	07/09/2015
DOL	NYC	*****6176	E N E L ELECTRICAL CORP		1107 MCDONALD AVENUE BROOKLYN NY 11230	07/30/2010	07/30/2015
DOL	DOL		EDWARD SUBEH		1 CHELSEA COURT ATLANTIC CITY NJ 08401	10/06/2008	10/06/2013
DOL	DOL	*****3554	ELITE BUILDING ENTERPRISES INC		34-08 PARKWAY DRIVE BALDWIN NY 11510	07/01/2008	07/21/2013
DOL	AG	****3233	EMEIS & EMEIS GENERAL CONTRACTING CORP		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL	*****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	DOL	****6101	ENHANCED DATA COM INC		75 SHERBROOK ROAD NORTH BABYLON NY 11704	07/01/2010	07/01/2015
DOL	DOL		ERROL L ALLEN		134-25 166 PLACE #5E JAMAICA NY 11434	08/07/2008	08/07/2013
DOL	DOL		ESCO INSTALLERS LLC		1 CHELSEA COURT ATLANTIC CITY NJ 08401	10/06/2008	10/06/2013
DOL	DOL	*****0329	FAULKS PLUMBING HEATING & AIR CONDITIONING INC		3 UPTON STREET HILTON NY 14468	06/10/2008	06/10/2013

DOL	DOL		FERNANDO GOMEZ		201 RICHARDS STREET BROOKLYN NY 11231	02/25/2009	02/25/2014
DOL	DOL	****0768	FISHER CONCRETE INC		741 WELSH ROAD JAVA CENTER NY 14082	04/08/2009	04/08/2014
DOL	DOL	*****0115	FOXCROFT NURSERIES INC		949 GROVESIDE ROAD BUSKIRK NY 12028	08/27/2008	08/27/2013
DOL	DOL		FRANCIS (FRANK) OSCIER		3677 SENECA STREET WEST SENECA NY 14224	09/03/2008	09/03/2013
DOL	NYC		FRANK (FRANCIS) OSCIER		3677 SENECA STREET WEST SENECA NY 14224	09/03/2008	09/03/2013
DOL	NYC		FRANK BAKER		24 EDNA DRIVE SYOSSET NY 11791	05/14/2008	05/14/2013
DOL	DOL		FRANK J MERCANDO	C/O MERCANDO CONTRACTIN G CO INC	134 MURRAY AVENUE YONKERS NY 10704	11/22/2008	11/22/2013
DOL	DOL		FRANK J MERCANDO		134 MURRAY AVENUE YONKERS NY 10704	12/11/2009	12/11/2014
DOL	DOL	*****0128	FRANK J TUCEK & SON INC		92 NORTH ROUTE 9W CONGERS NY 10920	01/29/2007	01/29/2012
DOL	DOL		FRANK ORTIZ		75 SHERBROOK ROAD NORTH BABYLON NY 11704	07/01/2010	07/01/2015
DOL	DOL		FRED ABDO	ABDO TILE COMPANY AKA ABDO TILE CO	6179 EAST MOLLOY ROAD EAST SYRACUSE NY 13057	06/25/2010	06/25/2015
DOL	DOL	*****9202	G & M PAINTING ENTERPRISES INC		13915 VILLAGE LANE RIVERVIEW MI 48192	02/05/2010	02/05/2015
DOL	DOL	****9832	G A FALCONE CONSTRUCTION INC		253 COMMONWEALTH AVENUE BUFFALO NY 14216	08/07/2007	08/07/2012
DOL	DOL	****7088	GBA CONTRACTING CORP		4015 21ST AVENUE ASTORIA NY 11105	01/11/2008	01/11/2013
DOL	NYC		GELSOMINA TASSONE		25 CLIFF STREET NEW ROCHELLE NY 10801	06/15/2010	06/15/2015
DOL	DOL		GEORGE A PATTI III		P O BOX 772 JAMESTOWN NY 14701	08/13/2010	08/13/2015
DOL	AG		GEORGE BEGAKIS		57-16 157TH STREET FLUSHING NY 11355	10/04/2006	10/04/2011
DOL	NYC		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DOL		GERALD A POLLOCK		336 TOMPKINS STREET CORTLAND NY 13045	06/29/2010	10/21/2015
DOL	AG		GERARD IPPOLITO		563 MUNCEY ROAD WEST ISLIP NY 11795	07/14/2008	07/14/2013
DOL	AG		GERASIMO ANDRIANIS		22-15 47TH STREET ASTORIA NY 11105	08/03/2006	08/03/2011
DOL	DOL		GREG SURACI		364 BLEAKER ROAD ROCHESTER NY 14609	10/25/2007	10/25/2012
DOL	DOL		GRIOGORIOS BELLOS		4015 21ST AVENUE ASTORIA NY 11105	01/11/2008	01/11/2013
DOL	DOL	****9985	GROUND LEVEL CONSTRUCTION		10 GABY LANE CHEEKTOWAGA NY 14227	10/15/2009	10/15/2014
DOL	DOL	*****8904	HALLOCKS CONSTRUCTION CORP	P O BOX 278	YORKTOWN HEIGHTS NY 10598	12/01/2008	12/01/2013
DOL	DOL		HARALAMBOS KARAS		80-12 ASTORIA BOULEVARD EAST ELMHURST NY 11370	11/22/2008	10/22/2013
DOL	DOL	*****0080	HI-AMP ELECTRICAL CONTRACTING CORP		265-12 HILLSIDE AVENUE FLORAL PARK NY 11004	02/15/2008	02/15/2013
DOL	DOL	****9893	HOXIE'S PAINTING CO INC		2219 VALLEY DRIVE SYRACUSE NY 13207	12/04/2009	12/04/2014
DOL	DOL	****6429	IDM ENTERPRISES INC		60 OUTWATER LANE GARFIELD NJ 07026	05/09/2009	05/09/2014
DOL	DOL	****6293	IMPRESSIVE CONCRETE CORP		264A SUBURBAN AVENUE DEER PARK NY 11729	12/18/2007	12/18/2012
DOL	DOL	****8898	IN-TECH CONSTRUCTION INC		8346 BREWERTON ROAD CICERO NY 13039	07/06/2007	07/06/2012
DOL	DOL	****7561	INDUS GENERAL CONSTRUCTION		33-04 91ST STREET JACKSON HEIGHTS NY 11372	04/28/2010	04/28/2015
DOL	NYC	****7728	INTEGRITY CONSTRUCTION & CONSULTING SERVS		7615 MYRTLE AVENUE GLENDALE NY 11385	02/15/2007	02/15/2012
DOL	DOL	****0488	INTERWORKS SYSTEMS, INC.		1233 WALT WHITMAN ROAD MELVILLE NY 11747	04/29/2008	04/29/2013
DOL	DOL		ISRAEL MONTESINOS		517 MILES SQUARE ROAD YONKERS NY 10701	02/15/2008	02/15/2013

DOL	DOL		IVAN D MARKOVSKI		60 OUTWATER LANE GARFIELD NJ 07026	05/09/2009	05/09/2014
DOL	DOL		IVAN TORRES		11 PLYMOUTH ROAD DIX HILLS NY 11746	02/15/2008	02/15/2013
DOL	DOL	****0579	J & I CONSTRUCTION CORP		110 FOURTH STREET NEW ROCHELLE NY 10801	02/15/2008	02/15/2013
DOL	DOL	****7357	J C MCCASHION CONSTRUCTION INC		84 FREDERICK AVENUE ALBANY NY 12205	04/13/2006	04/13/2011
DOL	DOL	****1584	J M TRI STATE TRUCKING INC		140 ARMSTRONG AVENUE SYRACUSE NY 13209	10/21/2009	10/21/2014
DOL	AG	****1562	JANS GENERAL CONSTRUCTION CORP.		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL		JASON ASBURY		22562 SEA BASS DRIVE BOCA RATON FL 33428	10/10/2007	10/10/2012
DOL	DOL		JAY MEYER		239 MARSH DRIVE DEWITT NY 13214	02/20/2007	02/20/2012
DOL	DOL		JEANETTE CALICCHIA		1223 PARK STREET PEEKSKILL NY 10566	09/12/2007	09/12/2012
DOL	DOL		JEFFREY ARTIERI		107 STEVENS STREET LOCKPORT NY 14094	11/04/2009	11/04/2014
DOL	DOL		JOHN B DUGAN		121 LINCOLN AVENUE ROCHESTER NY 14611	02/21/2008	02/21/2013
DOL	DA		JOHN BIAS		153 BAYWOODS LANE BAY SHORE NY 11706	03/19/2007	03/19/2012
DOL	DOL		JOHN BUONADONNA		283 NORTH MIDDLETOWN ROAD	09/28/2009	09/28/2014
DOL	NYC		JOHN C MCCASHION		PEARL RIVER NY 10965 84 FREDERICK AVENUE	04/13/2006	04/13/2011
DOL	DOL		JOHN DESCUL		ALBANY NY 12205 75 MCCULLOCH DRIVE	10/19/2010	10/19/2015
DOL	NYC		JOHN DITURI		DIX HILLS NY 11746 1107 MCDONALD AVENUE	07/30/2010	07/30/2015
DOL	DOL		JOHN JIULIANNI		BROOKLYN NY 11230 222 GAINSBORG AVENUE E	05/10/2010	05/10/2015
					WEST HARRISON NY 10604		
DOL	NYC		JOHN MARI JR		278 ROBINSON AVENUE NEW YORK NY 10312	04/06/2008	04/06/2013
DOL	NYC		JOHN O'SHEA		4350 BULLARD AVENUE BRONX NY 10466	01/28/2008	01/28/2013
DOL	DOL	****5970	JOHN PREVETE FRAMING AND JOHN PREVETE FRAMING INC	JOHN PREVETE	320 RIDGE ROAD WEST MILFORD NJ 07480	03/26/2008	03/26/2013
DOL	DOL		JOHN SAN SEVERE		C/O CRAIN CONSTRUCTION CO ONE KINDERHAMACK ROADHACKENSACK NJ 07061	10/02/2008	10/02/2013
DOL	DOL	****2701	JOHN SMYKLA	AFFORDABLE PAINTING PLUS	367 GREEVES ROAD NEW HAMPTON NY 10958	10/01/2010	10/01/2015
DOL	DOL		JOSE DOS SANTOS JR		85-08 60TH AVENUE ELMHURST NY 11373	11/21/2008	11/21/2013
DOL	DOL		JOSEPH CALICCHIA		1223 PARK STREET PEEKSKILL NY 10566	09/12/2007	09/12/2012
DOL	DOL		JOSEPH MONETTE		C/O JOHN MONETTE 140 ARMSTRONG AVENUESYRACUSE NY 13209	10/21/2009	10/21/2014
DOL	DOL	****1763	JR RESTORATION & ROOFING INC		152-65 11TH AVENUE WHITESTONE NY 11357	05/22/2008	05/22/2013
DOL	DOL		JULIUS AND GITA BEHREND		5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/3002
DOL	DOL	****9422	JUNKYARD CONSTRUCTION CORP.		2068 ANTHONY AVENUE BRONX NY 10457	12/26/2007	12/26/2012
DOL	DOL	*****3810	K M MARTELL CONSTRUCTION, INC.		57 CROSS ROAD MIDDLETOWN NY 10940	06/25/2007	06/25/2012
DOL	DOL	****9993	K M R ENTERPRISES		10 STUFFLE STREET CROPSEYVILLE NY 12052	12/20/2006	12/20/2011
DOL	DOL		K NELSON SACKOOR		16 JOY DRIVE NEW HYDE PARK NY 11040	01/05/2010	01/05/2015
DOL	DOL	****8648	K-STAR CONSTRUCTION CORP		42 48 161ST STREET FLUSHING NY 11358	12/11/2006	12/11/2011
DOL	NYC		KAMIL OZTURK		3715 KINGS HWY - STE 1D BROOKLYN NY 11234	07/08/2010	07/08/2015
DOL	NYC		KAZIMIERZ KONOPSKI		194 ASHLAND PLACE BROOKLYN NY 11217	03/06/2008	03/06/2013
DOL	AG	1	KEFCAL CONSTRUCTION, INC.		131 47TH STREET	01/25/2007	01/25/2012

DOL	NYC	****4923	KELLY'S SHEET METAL, INC.		1426 ATLANTIC AVENUE BROOKLYN NY 11216	12/28/2007	12/28/2012
DOL	DOL		KEMPTON MCINTOSH		8531 AVENUE B BROOKLYN NY 11236	12/16/2008	12/16/2013
DOL	DOL		KENNETH W. GRIFFIN		101 LILL STREET ROCHESTER NY 14621	05/01/2006	05/01/2011
DOL	DOL		KEVIN MARTELL		57 CROSS ROAD MIDDLETOWN NY 10940	06/25/2007	06/25/2012
DOL	AG	****3318	KOSMAR CONTRACTING CORP.		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL		KRIS CLARKSON		2484 CATON ROAD CORNING NY 14830	06/20/2007	06/20/2012
DOL	NYC	****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL	****9628	LANCET ARCH INC		112 HUDSON AVENUE ROCHESTER NY 14605	02/14/2006	10/19/2014
DOL	DOL		LANCET SPECIALTY CONTRACTING CORP		C/O CATENARY CONSTRUCTION 112 HUDSON AVENUEROCHESTER NY 14605	10/19/2009	10/19/2014
DOL	DOL		LARRY FRANGOS		5752 WEST WEBB ROAD YOUNGSTOWN OH 44515	05/21/2008	05/21/2013
DOL	DOL	****7907	LEEMA EXCAVATING INC		140 ARMSTRONG AVENUE SYRACUSE NY 13209	10/21/2009	10/21/2014
DOL	AG	****5102	LIBERTY TREE SERVICE, INC.		563 MUNCEY ROAD WEST ISLIP NY 11795	07/14/2008	07/14/2013
DOL	DOL	****6651	LIGHTNING FAST LABOR FORCE SERVICES, INC.		150 NORTH CHESTNUT STREET ROCHESTER NY 14604	05/01/2006	05/01/2011
DOL	DOL	****5953	LPD CONTRACTING INC		1205 MCBRIDE AVENUE WEST PATTERSON NJ 07424	08/27/2007	08/27/2012
DOL	DOL	****5171	LUVIN CONSTRUCTION CORP		P O BOX 357 CARLE PLACE NY 11514	03/15/2010	03/15/2015
DOL	DOL	****9875	M & S STRIPING INC		73 INDUSTRIAL PARK BLVD ELMIRA NY 14901	01/10/2007	01/10/2012
DOL	DOL	****9688	M K PAINTING INC		4157 SEVENTH STREET WYANDOTT MI 48192	05/14/2007	05/14/2012
DOL	AG		MANNS CONTRACTING CORP		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	NYC		MANUEL P TOBIO		150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/2998
DOL	NYC		MANUEL TOBIO		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL		MARIO R ECHEVERRIA JR		588 MEACHAM AVE-SUITE 103 ELMONT NY 11003	08/24/2010	08/24/2015
DOL	DOL		MARK LINDSLEY		355 COUNTY ROUTE 8 FULTON NY 13069	08/08/2009	08/14/2014
DOL	DOL		MASONRY CONSTRUCTION INC		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		MASONRY INDUSTRIES INC		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	AG	****9970	MAY CONSTRUCTION CO INC		700 SUMMER STREET STAMFORD CT	11/24/2009	11/24/2014
DOL	NYC	****4132	MCCASHION BROTHERS HOLDING COMPANY LLC		84 FREDERICK AVENUE ALBANY NY 12205	04/13/2006	04/13/2011
DOL	DOL		MCI CONSTRUCTION INC		975 OLD MEDFORD AVENUE FARMINGDALE NY 11738	08/24/2009	08/24/2014
DOL	DOL	****4259	MERCANDO CONTRACTING CO INC		134 MURRAY AVENUE YONKERS NY 10704	12/11/2009	12/11/2014
DOL	DOL	****0327	MERCANDO INDUSTRIES LLC		134 MURRAY AVENUE YONKERS NY 10704	12/11/2009	12/11/2014
DOL	DOL	****0241	MERIT FENCE CO INC		130 OLD ROUTE 6 CARMEL NY 10512	08/06/2003	02/02/2012
DOL	DOL		MICHAEL L. KRIVITZA	NORTHEAST TECHNOLOGI ES	105 PINE STREET - APT 2 EAST ROCHESTER NY 14445	05/14/2007	05/14/2012
DOL	DOL		MICHAEL STEVENS	STEVENS TRUCKING	2458 EAST RIVER ROAD CORTLAND NY 13045	01/23/2008	01/23/2013
DOL	DOL	****0860	MICHAEL STEVENS	STEVENS TRUCKING	2458 EAST RIVER ROAD CORTLAND NY 13045	01/23/2008	01/23/2013
DOL	DOL		MICHAEL TAYLOR		66 RYBKA ROAD STUYVESANT FALLS NY 12174	03/02/2007	03/02/2012
DOL	DOL	****0818	MILLER SANDBLASTING AND PAINTING		121 LINCOLN AVENUE ROCHESTER NY 14611	02/21/2008	02/21/2013

DOL	NYC		MOHAMMAD SELIM	73-12 35TH AVE - APT F63 JACKSON HEIGHTS NY 11372	03/04/2010	03/04/2015
DOL	DA		MOHAMMED SALEEM	768 LYDIG AVENUE BRONX NY 10462	08/18/2009	05/25/2015
DOL	DOL	*****2251	MURDOUGH DEVELOPMENT CO., INC.	203 KELLY DRIVE EAST AURORA NY 14052	03/26/2008	03/26/2013
DOL	DA	****9642	MUTUAL OF AMERICAL GENERAL CONSTRUCTION & MANAGEMENT CORP	768 LYDIG AVENUE BRONX NY 10462	08/18/2009	05/25/2015
DOL	DOL	****4133	NASDA ELECTRICAL ENTERPRISES INC	134-25 166 PLACE - #5E JAMAICA NY 11434	08/07/2008	08/07/2013
DOL	DOL	****9445	NASDA ENTERPRISES INC	134-25 166 PLACE #5E JAMAICA NY 11434	08/07/2008	08/07/2013
DOL	DOL	****2213	NEUSS CONSTRUCTION, INC.	1191 ROUTE 9W - SUITE #C6 MARLBORO NY 12542	09/06/2006	09/06/2011
DOL	DOL		NICK NITIS	3 ALAN B SHEPARD PLACE YONKERS NY 10705	12/11/2006	12/11/2011
DOL	DOL		NICOLE SPELLMAN	2081 JACKSON AVENUE COPIAGUE NY 11726	06/03/2010	06/03/2015
DOL	DOL	****9890	NOBLE CONSTRUCTION	23960 WHITE ROAD WATERTOWN NY 13601	02/14/2008	02/14/2013
DOL	DOL	****7771	NORTHEAST TECHNOLOGIES	105 PINE STREET APT. 2 EAST ROCHESTER NY 14445	05/14/2007	05/14/2012
DOL	DOL	****1833	NORTHEASTERN SUPREME FLOOR CO.,INC	66 BENEDICT STREET CASTLETON NY 12033	03/02/2007	03/02/2012
DOL	DOL	****7041	NYCOM SERVICES CORP	80-12 ASTORIA BOULEVARD EAST ELMHURST NY 11370	11/22/2008	11/22/2013
DOL	DOL	****0797	O GLOBO CONSTRUCTION CORP	85-06 60TH AVENUE ELMHURST NY 11373	11/21/2008	11/21/2013
DOL	DOL	****1803	OMNI CONTRACTING COMPANY, INC.	3 ALAN B. SHEPARD PLACE YONKERS NY 10705	12/11/2006	12/11/2011
DOL	NYC	****6176	ORSOGRIL NEW YORK INC	25 CLIFF STREET NEW ROCHELLE NY 10801	06/15/2010	06/15/2015
DOL	NYC	*****3855	OT & T INC	36-28 23RD STREET LONG ISLAND CITY NY 11106	01/15/2008	05/14/2013
DOL	NYC	****9833	PARADISE CONSTRUCTION CORP	6814 8TH AVENUE BROOKLYN NY 11220	12/03/2007	12/03/2012
DOL	DOL	****3039	PARAGON PLATE GLASS, INC.	210 FACTORY STREET WATERTOWN NY 13601	11/07/2006	11/07/2011
DOL	DOL	****5226	PASCARELLA & SONS	459 EVERDALE AVENUE WEST ISLIP NY 11759	01/10/2010	01/10/2015
DOL	DOL		PATRICK BURNS	19 E. CAYUGA STREET OSWEGO NY 13126	05/15/2008	05/15/2013
DOL	DOL		PATRICK SHAUGHNESSY	88 REDWOOD DRIVE ROCHESTER NY 14617	05/16/2008	05/16/2013
DOL	DOL		PEDRO RINCON	131 MELROSE STREET BROOKLYN NY 11206	03/02/2010	03/02/2015
DOL	AG		PETER GOUZOS	131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL		PETER J LANDI	249 MAIN STREET EASTCHESTER NY 10709	10/05/2009	10/05/2014
DOL	DOL	****7229	PETER J LANDI INC	249 MAIN STREET EASTCHESTER NY 10709	10/05/2009	10/05/2014
DOL	DOL	*****1136	PHOENIX ELECTRICIANS COMPANY INC	540 BROADWAY P O BOX 22222ALBANY NY 12201	03/09/2010	03/09/2015
DOL	DOL	****5419	PINE VALLEY LANDSCAPE CORP	RR 1, BOX 285-B BUSKIRK NY 12028	08/27/2008	08/27/2013
DOL	DOL		PRECISION DEVELOPMENT CORP	115 LEWIS STREET YONKERS NY 10703	05/12/2009	05/12/2014
DOL	DOL	****9359	PRECISION STEEL ERECTORS	P O BOX 949 BREWERTON NY 13029	09/02/2008	09/02/2013
DOL	DOL	****2326	PUTMAN CONSTRUCTION COMPANY OF WESTERN NY	29 PHYLLIS AVENUE BUFFALO NY 14215	09/03/2008	09/03/2013
DOL	DOL	****7438	R & H COMMERCIAL FLOORING, INC.	102 WILLOW AVENUE WATKINS GLEN NY 14891	06/20/2007	06/20/2012
DOL	DOL	****1596	R & T SUPREME SPORTS FLOORING, LLC	66 RYBKA ROAD STUYVESANT FALLS NY 12174	03/02/2007	03/02/2012
DOL	DOL	****1629	R S CONSTRUCTION COMPANY LLC	571 MILES SQUARE ROAD YONKERS NY 10701	04/04/2007	04/04/2012
DOL	AG	****2626	RAINBOW RENOVATIONS, INC.	35-44 CRESCENT STREET LONG ISLAND CITY NY 11106	08/03/2006	08/03/2011
DOL	DOL		RAMON BONILLA	938 E 232ND STREET #2 BRONX NY 10466	05/25/2010	05/25/2015
DOL	DOL	****7294	REDWOOD FLOORING, INC.	88 REDWOOD DRIVE ROCHESTER NY 14617	05/16/2008	05/16/2013

DOL								
DOL DOL ROBERT DIMARSICO 1331 WAIT THETTIN ROAD 04/29/2016 04/29/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017	DOL	NYC	****6978	RISINGTECH INC			03/25/2010	03/25/2015
DOL DOL ROBERT OTHANLON GES MEDILAND AVENUE 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/09/2017 07/	DOL	DOL		ROBBYE BISSESAR			01/11/2003	01/11/3003
DOL DOL POSSESSION DOL POSSESSION DOL POSSESSION DOL DOL POSSESSION DOL POSSESSION DOL DOL POSSESSION POSSESSION DOL POSSESSION POSSESSION DOL POSSESSION POSSESSION DOL POSSESSION POSSESSION POSSESSION POSSESSION POSSES	DOL	DOL		ROBERT DIMARSICO			04/29/2008	04/29/2013
DOL DOL """1271 ROBERTS CONSTRUCTION OF SANGER AFWEILE DOL """8025 ROJO MECHANICAL LLC SOR E 220ND STREET #2 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/28/2010 05/2	DOL	DOL		ROBERT O'HANLON			07/09/2007	07/09/2012
DOL DOL POSSESS PO	DOL	DOL		ROBERT STEVENSON			04/04/2007	04/04/2012
DOL DOL POL DOL	DOL	****1721				01/28/2009	01/28/2014	
DOL DOL RONALD R SAVOY CO CNY MECHANICA ME	DOL	DOL	****3467	ROCKERS AND NOCKERS LLC			10/23/2007	10/23/2012
MECHANICAL ASSOCIATE EAST SYRACUSE NY 1907 10/10/2012 10/10/2012 10/10/2012 10/10/2012 10/10/2012 10/10/2012 10/10/2012 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/2015 10/10/20	DOL	DOL	*****9025	ROJO MECHANICAL LLC			05/25/2010	05/25/2015
DOL DOL Color DOL DOL PROSE PAINTING CORP 22 GAINSBORG AVENUE 05/10/2010 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10/2015 05/10	DOL	DOL		RONALD R SAVOY	MECHANICAL ASSOCIATES		11/06/2008	11/06/2013
DOL DOL RUDOLPH NEUSS 8 FAR HORIZONS DRIVE 09/06/2006 09/06/2011	DOL	DOL		ROSARIO CARRUBBA			10/10/2007	10/10/2012
DOL DOL RUDOLPH NEUSS 8 FAR HORDONS DRIVE 09/06/2006 09/06/2011	DOL	DOL	****5905	ROSE PAINTING CORP		EAST	05/10/2010	05/10/2015
DOL DOL DOL RUTH H SUTTON 930 GROVESIDE ROAD 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018 08/27/2018	DOL	DOL		RUDOLPH NEUSS		8 FAR HORIZONS DRIVE	09/06/2006	09/06/2011
DOL DOL WING S B WATERPROOFING INC SUSTE SIR 11/04/2009 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2014 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2019 11/04/2018 11/04/2019 11/04/2018 11/04/2019 11/04/2018 11/04/2019 11/04/2018 11/04/2019 11/04/2018 11/04/2018 11/04/2019 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018 11/04/2018	DOL	DOL		RUSSELL TUPPER		8346 BREWERTON ROAD	07/06/2007	07/06/2012
DOL DOL DOL 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000	DOL	DOL		RUTH H SUTTON			08/27/2008	08/27/2013
DECORATING INC	DOL	DOL	*****2585	S B WATERPROOFING INC		2167 CONEY ISLAND	11/04/2009	11/04/2014
DOL DOL	DOL	DOL	*****9066				12/01/2008	12/01/2013
DOL NYC	DOL	NYC	****0987				01/04/2008	01/04/2013
BRONX NY 10461	DOL	DOL	****6348	SEABURY ENTERPRISES LLC			10/10/2007	10/10/2012
ENVIRONMENTAL SERVICES HOUSTON TX 77084	DOL	NYC	****4020	SERVI-TEK ELEVATOR CORP			07/16/2009	07/16/2014
33-04 91ST STREETJACKSON HEIGHTS NY 11372	DOL	NYC	*****8252	ENVIRONMENTAL SERVICES			06/12/2007	06/12/2012
NEW YORK NY 10016	DOL	DOL		SHAIKF YOUSUF		33-04 91ST STREETJACKSON	04/28/2010	04/28/2015
BUFFALO NY 14215	DOL	DOL	*****0256	SIERRA ERECTORS INC			04/16/2009	04/16/2014
SEALCOATING	DOL	DOL	*****0415	SIGNAL CONSTRUCTION LLC			11/14/2006	02/25/2015
AND STRIPING SERVICE	DOL	DOL	****8469				08/13/2010	08/13/2015
DEWITT NY 13214	DOL	DOL	****8469			P O BOX 772JAMESTOWN NY	04/04/2007	08/13/2015
BROOKLYN NY 11232 DOL AG *****7480 SNA CONTRACTING CORP 131 47TH STREET BROOKLYN NY 11232 D1/25/2012 BROOKLYN NY 11232 D1/25/2012 D1/25/201	DOL	DOL	****9397	SKY COMMUNICATIONS, INC.			02/20/2007	02/20/2012
DOL AG *****2738 SNA CONTRACTING CORP. 131 47TH STREET BROOKLYN NY 11232 01/25/2007 01/25/2012	DOL	AG		SN CONTRACTING CORP			01/25/2007	01/25/2012
DOL DOL SPASOJE DOBRIC 61 WILLET STREET - SUITE 07/09/2010 07/09/2015	DOL	AG	****7480	SNA CONTRACTING CORP			01/26/2007	01/25/2012
DOL DOL ******0918 SPECTRUM CONTRACTING 875 THIRD AVENUE 12/11/2006 12/11/2011	DOL	AG	****2738	SNA CONTRACTING CORP.			01/25/2007	01/25/2012
GROUP INC NEW YORK NY 10022	DOL	DOL		SPASOJE DOBRIC			07/09/2010	07/09/2015
BROOKLYN NY 11232	DOL	DOL	*****0918				12/11/2006	12/11/2011
BROOKLYN NY 11232	DOL	AG	****1355	SPIRIDON ANTHOULIS			01/25/2007	01/25/2012
QUEENS VILLAGE NY 11427 DOL NYC *****6650 START ELEVATOR 4350 BULLARD AVENUE 01/28/2008 01/28/2013	DOL	AG		STACEY GOUZOS			01/25/2007	01/25/2012
	DOL	DOL	****3496	STAR INTERNATIONAL INC			08/11/2003	08/11/3003
	DOL	NYC	****6650				01/28/2008	01/28/2013

DOL	NYC	****3896	START ELEVATOR MAINTENANCE, INC.	4350 BULLARD AVENUE BRONX NY 10466	01/28/2008	01/28/2013
DOL	NYC	****1216	START ELEVATOR REPAIR, INC.	4350 BULLARD AVENUE BRONX NY 10466	01/28/2008	01/28/2013
DOL	NYC	****2101	START ELEVATOR, INC.	4350 BULLARD AVENUE BRONX NY 10466	01/28/2008	01/28/2013
DOL	DOL		STEED GENERAL CONTRACTORS INC	1445 COMMERCE AVENUE BRONX NY 10461	10/09/2007	10/09/2012
DOL	DOL		STEPHEN BALZER	34-08 PARKWAY DRIVE BALDWIN NY 11510	07/01/2008	07/01/2013
DOL	DOL		STEVE PAPASTEFANOU	1445 COMMERCE AVENUE BRONX NY 10461	10/09/2007	10/09/2012
DOL	DOL	****4081	STS CONSTRUCTION OF WNY	893 EAGLE STREET BUFFALO NY 14210	06/09/2009	06/09/2014
DOL	DOL	****5966	SUPREME SPORT SURFACES, INC.	66 BENEDICT STREET CASTLETON NY 12033	03/02/2007	03/02/2012
DOL	DOL	****2036	SURACI ENTERPRISES INC	364 BLEAKER ROAD ROCHESTER NY 14609	10/25/2007	10/25/2012
DOL	AG		TAO GENERAL CONTRACTORS INC	131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL		THEODORE F FAULKS	18 FIREWEED TRAIL HILTON NY 14468	06/10/2008	06/10/2013
DOL	DOL		THOMAS ASCHMONEIT	79 MADISON AVENUE - FL 17 NEW YORK NY 10016	04/16/2009	04/16/2014
DOL	DOL		THOMAS E. MOONEY	164 WINSLOW STREET WATERTOWN NY 13601	11/07/2006	11/07/2011
DOL	DOL		THOMAS GORMALLY	250 KNEELAND AVENUE YONKERS NY 10705	07/09/2007	07/09/2012
DOL	DOL		TIMOTHY P SUCH	893 EAGLE STREET BUFFALO NY 14210	06/09/2009	06/09/2014
DOL	DOL		TNT DEMOLITION AND ENVIRONMENTAL INC	355 COUNTY ROUTE 8 FULTON NY 13069	08/08/2009	08/19/2014
DOL	DOL	*****3315	TOTAL DOOR SUPPLY & INSTALLATION INC	16 JOY DRIVE NEW HYDE PPARK NY 11040	01/05/2010	01/05/2015
DOL	DOL	*****3315	TOTAL DOOR SUPPLY & INSTALLATION INC	16 JOY DRIVE NEW HYDE PPARK NY 11040	01/05/2010	01/05/2015
DOL	DOL		TRI STATE TRUCKING INC	140 ARMSTRONG AVENUE SYRACUSE NY 13209	10/21/2009	10/21/2014
DOL	NYC	****5184	UDDIN USA CORP	663 DEGRAW STREET BROOKLYN NY 11217	05/17/2007	05/17/2012
DOL	DOL		ULIANO AND SONS INC	22 GRIFFEN COURT MILLER PLACE NY 11746	10/26/2010	10/26/2015
DOL	DOL	*****8663	URBAN-SUBURBAN RECREATION INC	3 LUCON DRIVE DEER PARK NY 11728	06/20/2007	06/20/2012
DOL	DOL	*****0854	VANESSA CONSTRUCTION INC	588 MEACHAM AVE/STE 103 ELMONT NY 11003	08/24/2010	08/24/2015
DOL	DA		VASILIOS TSIMITRAS	235 91ST STREET BROOKLYN NY 11209	11/27/2006	11/27/2011
DOL	DOL		VIRGINIA L CAPONE	137 E MAIN STREET ELMSFORD NY 10523	12/01/2008	12/01/2013
DOL	NYC	****9936	VISHAL CONSTRUCTION INC	73-12 35TH AVE - APT F63 JACKSON HEIGHTS NY 11272	03/04/2010	03/04/2015
DOL	NYC	****5466	VIVA VICTORIA ENTERPRISES LTD	10317 90TH STREET OZONE PARK NY 11417	06/12/2006	06/12/2011
DOL	DOL	****0329	WET PAINT CO. OF OSWEGO, INC	19 E. CAYUGA STREET OSWEGO NY 13126	05/15/2008	05/15/2013
DOL	DOL		WHITE PLAINS CARPENTRY CORP	220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		WILLIAM PUTNAM	50 RIDGE ROAD BUFFALO NY 14215	09/03/2008	09/03/2013
DOL	DA		WILLIAM TSIMITRAS	235 91ST STREET BROOKLYN NY 11209	11/27/2006	11/27/2011
DOL	DOL		WILLIAM W FARMER JR	112 HUDSON AVENUE ROCHESTER NY 14605	10/19/2009	10/19/2014
DOL	DOL		WINSTON J. GOINS, SR.	87 MALLING DRIVE ROCHESTER NY 14621	05/01/2006	05/01/2011
DOL	AG		YANG GENERAL CONTRACTING LTD	131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	AG	****0288	YIN CONSTRUCTION LTD	131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	AG		YULY ARONSON	700 SUMMER STREET STAMFORD CT	11/24/2009	11/24/2014
DOL	AG	****1564	ZARBEN GENERAL CONSTRUCTION INC	131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL		ZEPHENIAH DAVIS	2068 ANTHONY AVENUE BRONX NY 10457	12/26/2007	12/26/2012

AGENCY	Fiscal Officer	SSN/FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	NYC	*****8212	VELOX CLEANING CORP		32 ESSEX LANE WILLINGBORO NJ 08046	07/09/2010	07/09/2015